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COURSE OF LECTURES
ON
DISEASES OF THE SKIN;
THEIR
HISTORY, PATHOLOGY, AND TREATMENT.

Delivered in the Middlesex Hospital, during the Summer Session, 1842, by

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LECTURE XXVII.

ECTHYMA.

ECTHYMA is an inflammation of the skin which is characterised by the development of large and prominent pustules on an inflamed base, the pustules being succeeded by thick, dark-coloured crusts, which are deeply embedded in the skin, and leave cicatrices at their fall, and sometimes ulcerations. From the inflammatory character of the dermis in the seat of the pustule ecthyma corresponds with the definition of *phlyzacia*, a name by which the pustules are sometimes distinguished; while the hard and prominent base, which forms the nidus of the pus, and the papular origin of the pustule, have gained for it the appellation of *papulous scall*. The pustules of ecthyma are, for the most part, discreet, and are produced in succession; they are generally confined to a small region of the skin, and the disease continues for a variable period,—from one or two weeks to as many months.

The varieties of ecthyma admit of classification under two heads, acute and chronic; the former corresponding with the ecthyma vulgare of Willan, and the latter comprising his three species, ecthyma infantile, luridum, and cachecticum.

ECTHYMA ACUTUM SEU VULGARE.

Acute ecthyma is known by the rapidity of march and completion of the phases of the pustules, and by the comparative health of constitution of the individual in whom it occurs. It commences in the form of inflamed circular patches, which rise to a pimple in the centre. On the summit of this pimple, pus is deposited, and continues to accumulate until a pustule of the size and form of a split-pea, or even larger, is produced. The base of the pustule, corresponding with the base of the papula which preceded it, is hard, and surrounded by an inflamed areola of considerable size. After the formation of pus is suspended the secretion dries up, and a hard, dark-coloured scab results, which remains adherent to the skin for several days, and leaves upon its fall a deeply-congested cicatrix. Sometimes, in place of a cicatrix, a small ulcer remains, which is some time in getting well.

The eruption of ecthyma acutum may occur on any part of the body, but is most frequent on the neck, the shoulders, and the face. Its development is attended with pain, which is sometimes severe and lancinating. The individual on whom the eruption occurs is always more or less out of health, and the constitutional symptoms which exist are associated with, and not dependent on, the cutaneous disease.

Rayer gives the following account of the changes which ensue in the pustules during their development. In the first stage there is "merely sanguineous injection with conical tumefaction of the corion;" secondly, "in the apex, more rarely over the whole surface of the elevations and under the cuticle, there is an effusion of a certain quantity of purulent serum;" in the third stage "there is a kind of pseudo-membranous matter deposited in the centre of the elevation, which is now evidently perforated;" fourthly, "after the voidance of this matter and the removal of the cuticle, the pustule appears under the form of a cup-shaped cavity, surrounded by a hard, thick, puffed edge;" lastly, "on the following days this thickened margin subsides, at the same time that a slight cicatrix is formed under the crust, the centre of which is fixed within the point where the perforation had been observed."

ECTHYMA CHRONICUM.

Ecthyma is more frequently a chronic than an acute affection, and is always asso-

ciated with disorder of the system and depression of the constitutional powers. In the chronic state the eruption is slow in its progress; it is, moreover, successive and long-standing, and the pustules are followed by ulcers and ill-conditioned sores.

The *ecthyma infantile* of Willan is a chronic ecthyma developed in badly fed, cachectic children, and is generally associated with some constitutional disease, such as scrofula, or with disease of the mucous membranes. The pustules are variable in point of size and number, and when they terminate in ulcerations the ulcers are unhealthy and difficult of cure.

The *ecthyma luridum* of Willan is the chronic ecthyma of old persons and those who have injured their constitution by excess. The areolæ of the pustules in these cases are purplish and livid, and the pus itself more or less altered in its appearance by admixture with blood. The eruption is slow and tardy in its progress,—the pustules are of large size, and they are frequently followed by obstinate ulcerations.

The *ecthyma cachecticum* of Willan is identical with the two preceding forms of disease, and the term is applicable to all periods of life. The seat of cachectic ecthyma is most frequently the lower extremities, where it is liable to run into foul and unhealthy ulcers.

Ecthyma is not uncommonly associated with the papular diseases of the skin, lichen and prurigo; and the pustules of the so-called scabies purulenta are generally phlyzacious. Secondary syphilis, also, assumes the characters of ecthyma occasionally.

Diagnosis.—The pustules of ecthyma are easily distinguished from those of other cutaneous diseases by their size, the breadth and vivid redness of their areolæ, and the hardness of their bases. These characters sufficiently distinguish the disease from impetigo, and also from acne and sycosis.

Syphilitic ecthyma is known by the coppery hue of the areolæ, and by other signs indicative of constitutional syphilis.

You will be much aided in your diagnosis of ecthyma by knowing that the pustules produced upon the skin by tartar-emetic are of this kind. They have hardened and inflamed bases, and an inflamed areola; they contain a false membrane as well as pus, and they are generally umbilicated, like the pustules of small-pox.

Causes.—Ecthyma may be the consequence of simple irritation affecting the skin, or it may be the result of constitutional disorder. Of the former class of causes are tartar-emetic, and other irritating substances, kept in contact with the skin for some time, such as lime, sugar, salt, sulphur, &c. Grocers are liable to the eruption of ecthyma on the hands and wrists from contact with sugar; bricklayers from contact with lime; and the application of the compound sulphur ointment to the skin not unfrequently excites this eruption.

The local irritation caused by some diseases of the skin is alike productive of this eruption, hence its association with scabies, occasioning the so-called scabies purulenta; hence also its occasional combination with prurigo, herpes, and the exanthemata of the eruptive fevers.

The constitutional causes of ecthyma are all such as reduce the powers of the system and engender a concomitant irritability; hence its frequent association with cachexia. It is commonly met with as a consequence of squalid poverty and deprivation of the necessaries of life, and under these circumstances is popularly ascribed to "poorness of blood." I have frequently seen it also in the inhabitants of hospitals and poorhouses, and it is by no means uncommon in those whose duties require them to breathe for many hours the tainted atmosphere of the sick at a time when their powers are enfeebled by other depressing avocations.

Prognosis.—The opinion that we should be led to form of the duration and issue of ecthyma would be determined by the state of constitution of the patient rather than of the disease. It is by no means a fatal disease.

Treatment.—Our first object in this, as in every other disease, should be the removal of the cause. This alone may be sufficient where the latter is local, but where it is constitutional we must resort to other means. The best local applications are sedative and emollient fomentations; sedative and astringent lotions, such as that of the superacetate of lead and sulphate of zinc, or the liquor plumbi, or oxide of zinc ointment. When ulcers are formed and put on unhealthy characters, the common stimulating treatment must be pursued. Your treatment of these cases must be necessarily modified by a variety of circumstances, as by the seat of the disease, and the occupations of the individual.

The general treatment should be commenced with laxatives, and followed up or combined with tonics or alteratives, as the case may appear to need. The medicines on which I place most reliance in these cases are the chlorate or sulphate of potash in infusum rhæi; the hydriodate of potash in decoction of sarsaparilla; the tincture of gentian with mineral acids; sulphate of quinine in infusum rosæ compositum; or the citrate or acetate of iron. To these remedies I add the shower-bath, taken daily, and followed by vigorous frictions.

DEPOSITIVE INFLAMMATION OF THE DERMIS.

The pathological changes which we have hitherto examined as taking place in the dermis, and which have formed the basis of classification of the previous groups of diseases, are, simple congestion, congestion

with effusion of serum or lymph, and congestion with effusion of pus. We have now to consider certain elevations, of small size, occurring in the texture of the superficies of the dermis, and known by the term *pimples*. These constitute the order Papulæ of Willan, and, according to my investigation, they are occasioned by an effusion or deposition of plastic lymph in the tissue of one or several of the papillæ; hence I have termed the pathological change, for want of a better expression, *depositive inflammation*.

The propriety of regarding in this light the pathological structure of pimples, receives additional support from the nature of a symptom which so constantly coexists with their presence as to deserve to be considered as pathognomonic; namely, pruritus. The moderate degree of pressure produced upon the nervous loop of a papilla by effused lymph is calculated to produce this morbid sensation, without causing a degree of augmentation amounting to real pain; and the same effect may result from the transudation of the fluid part of the lymph through the neurilema of the nerves, so as to disturb temporarily their nutrition.

The definition of the term papula given by Willan, is so appropriate that I cannot do better than repeat it in his own words. A papula, or pimple, he says, "is a very small and acuminated elevation of the cuticle, with an inflamed base, very seldom containing a fluid or suppurating, and commonly terminating in scurf." Willan here makes use of the term cuticle in the indefinite manner which was constant at the time in which he lived, when the terms of anatomy were employed without regard to their precise meaning. He should have said elevation of the dermis, in place of "elevation of the cuticle," and then the context, "with an inflamed base," would have been correct.

The diseases embraced by the present group are three in number, namely,—

Strophulus,
Lichen,
Prurigo.

The two former of these are considered by some authors to be the same disease, differing only in the age of the patient whom it attacks, strophulus, in fact, being the lichen of infants. There can be no objection to regard them as such; nor, on the other hand, can I conceive any advantage in combining, perhaps I might say confusing, them under the same name. Strophulus is venerable for its antiquity, and, in a word, conveys to the medical practitioner a complete picture of the disease to be expressed. Lichen is also well understood, although it has evidently escaped from its connection with the squamous diseases to give a name to a papular eruption. Alibert classes the whole of the papular diseases under the common appellative—prurigo.

There are some differences in the general characters of the papular diseases. The pimples of strophulus are more prominent and softer than those of lichen; while the papulæ of prurigo are broad, scarcely raised above the level of the surrounding skin, often inappreciable to the eye, and to be detected only by means of the touch. In strophulus, again, the papulæ are often brightly red, or they may be pale and almost white; in lichen they are mostly of a deep or dull red hue, while in prurigo there is no alteration in the colour of the skin. Other differences are met with in the degree andkind of pruritus; in strophulus there is but little itching; in lichen this is considerable and severe; but in prurigo the itching is of a painful nature, taking place in violent paroxysms, and for the time incessant. Papulæ terminate by resolution, and are followed by furfuraceous desquamation of the epidermis.

While considering the general characters of other groups of cutaneous diseases I remarked on the transitional resemblances observed in the respective groups. The present, or *depositive* group, possesses no such alliance with that which preceded, namely, suppurative inflammation of the dermis; but with the succeeding group, namely, squamous inflammation of the dermis, it is associated in several particulars. Like the squamous inflammations it is raised above the surface of the surrounding skin, and produces a thin, scaly incrustation.

STROPHULUS, OR RED GUM.

Strophulus is the name employed to designate an eruption of pimples occurring during infantile life, and dependant upon the many sources of mucous irritation to which children are subject at that period. A common cause of strophulus is dentition, hence the eruption is very generally known by the name of *tooth-rash*.

The pimples of strophulus are developed in patches of various size on any part of the surface of the body. They are usually of a bright-red colour, but are sometimes paler than the surrounding skin; they give rise to pruritus whenever the temperature of the body is raised, and they terminate by resolution and desquamation of the epidermis.

Willan has described five varieties of strophulus, which differ from each other in no essential particulars; they are:—

Strophulus intertinctus,
" confertus,
" volaticus,
" albidus,
" candidus.

STROPHULUS INTERTINCTUS.

In strophulus intertinctus, the *red gum* or *red gown* of vernacular language, the clusters of red pimples are intermingled with erythematous spots and patches of

variable size. Sometimes the two combined cover the cheeks completely and the greater part of the arms, or are distributed generally over the surface of the body. The eruption lasts for about a week and then declines unless fresh patches appear, in which case it may be prolonged for a fortnight or more.

STROPHULUS CONFERTUS.

Under the influence of a greater degree of irritation than that which occasions strophulus intertinctus, or in a more irritable skin, the pimples appear in an aggregated or confluent form. They are smaller in size, give rise to more pruritus than the preceding, and sometimes cause chapping of the skin with considerable epidermic exfoliation. This variety is most frequently induced by the irritation of teething, and is that, therefore, which properly goes by the name of *tooth-rash*.

Strophulus confertus may occur at any period of infantile life, and may be more or less severe in its effects. Commonly it subsides at the end of two or three weeks, but, in an aggravated form, may be prolonged for as many months, or until, as Willan remarks, the infant attains its first year.

STROPHULUS VOLATICUS.

An eruption of inflamed pimples in clusters of small size, and dispersed over the surface of the body, is sometimes accompanied by a slight febricula, and results from a temporary cause. This eruption is remarkable for its speedy disappearance, subsiding in two or three days and passing entirely away, or vanishing in one place to appear by successive eruptions in another. The clusters usually contain from three to twelve papulæ, they become brownish during their subsidence, and are succeeded by epidermic desquamation.

STROPHULUS ALBIDUS.

In strophulus albidus the pimples are pale and surrounded by a slight areola of redness, which sets off their prominent character. They occur most frequently in the face, neck, and breast, and are often intermingled with the red papulæ of the other varieties.

STROPHULUS CANDIDUS.

Strophulus candidus is an eruption of the later periods of dentition, and is also remarkable for the paleness of its papulæ. The latter are of larger size than in the other varieties; they are smooth, tense, hard, and round, and have no areola of redness surrounding them. They are distributed irregularly over the surface of the body, and subside in the course of a week or ten days.

Diagnosis.—Strophulus is unlikely to be confounded with any other cutaneous disease; its occurrence in infancy and its papular character are a sufficient diagnosis. Other circumstances will prevent you mistaking varicella papularis for this eruption.

Causes.—The more frequent cause of strophulus is irritation of the gastro-pulmonary mucous membrane, or dentition. Sometimes it appears due to local irritation of the skin, from the contact of coarse or improper raiment; but in these cases there is usually some mucous excitement also present. The eruption is not unfrequently excited by vaccination.

Prognosis.—Strophulus is a very mild affection, and is only important so far as its action as a source of inconvenience is concerned.

Treatment.—Daily ablutions of the skin with soap, and some slight laxative or antacid, will frequently suffice for the management of strophulus. Willan warns us of the danger of retrocession; this caution you may bear in mind in your treatment, and should any symptoms arise that indicate visceral congestion, employ the ordinary measures for its relief, such as a vapour-bath, or the warm-bath containing mustard. When the local irritation caused by the eruption is troublesome, you may have recourse to a lotion of acetate of lead or sulphate of zinc, or, better still, to an emulsion of bitter almonds. But if these lotions fail, as they frequently will, others must be resorted to, such as one containing lemon-juice or acetic acid, salt and water, or alum. When the health of the mother is in fault, and the cause of irritation is the milk of the parent, your treatment must be directed towards her. When difficult and painful dentition appear to be the exciting cause, you must incise the gums; and if the irritation be gastro-pulmonary or cerebral, your treatment must be regulated accordingly.

LICHEN.

Lichen is the most common of the papular eruptions of the skin. It consists in the presence of numerous papulæ, of about the size of millet-seeds, conical in their form and reddish in their hue, distributed over various parts of the body, generally in patches and clusters of small extent. To the touch the pimples are hard, and they are attended by considerable itching and tingling. They terminate by resolution and furfuraceous desquamation of the epidermis, and in a few instances in superficial ulceration.

The essential varieties of lichen are two in number, namely,—

Lichen simplex,
„ agrius;

but to these have been added by Willan, six other varieties, which may be considered as modifications or sub-varieties of lichen simplex. To the professed dermatologist these numerous divisions are interesting, but to the student and general practitioner they are tiresome and often perplexing. It is my duty, however, to explain to you the mean-

ing of the terms, I therefore mention them to you, but only as sub-varieties of lichen simplex; they are:—

Lichen lividus,
" pilaris,
" circumscriptus,
" gyratus,
" urticatus,
" tropicus.

LICHEN SIMPLEX.

In simple lichen the papulæ present the general characters which I have just described. They are small, conical, reddish, collected here and there into small clusters, and distributed pretty generally over the part affected, or over the entire body.

Sometimes the eruption sets in with febrile symptoms and assumes an acute character, in which case the papulæ are more inflamed and irritable than common, the congestion of the skin is greater, and the eruption speedily passes off. But commonly lichen is a chronic affection, lasting for several weeks or months, and prolonged by successive eruptions. Each papula, taken singly, runs a course of about a week or ten days, and is then lost among the newly-developed papulæ which spring up around it. When the disease has continued for some time, the skin is covered by considerable furfuraceous desquamation, which is especially copious in the grooves formed by the folding of the skin and in the flexures of the joints.

In the chronic states of this disease the integument becomes thickened and indurated, and the appearance of the papulæ is considerably modified.

The common seat of lichen, when it is partially distributed, are the backs of the hands, the forearms, the face and trunk, or the legs below the knees.

Lichen Lividus.

The lichen lividus is a lichen simplex occurring in persons whose powers are reduced by previous illness or want, or in those of a weakly and debilitated constitution. Hence we occasionally meet with it among the inhabitants of confined and unhealthy localities, or in the midst of the squalor and wretchedness of the lower classes. The papulæ, in this form of the disease, are purplish or livid in their appearance; the congestion around them has a dull and leaden hue; they are soft in their texture, and not unfrequently intermingled with petechiæ. The disease is essentially chronic, and there is more or less of a dry furfuraceous desquamation.

Lichen Pilaris.

Lichen pilaris, as its name denotes, is a lichenous eruption developed around the base of the hairs, so that each hair appears to issue from the summit of one of these small, conical, more or less red pimples, and the inflammatory congestion extends more or less deeply into the hair follicle. The eruption is excessively irritable, and gives rise to a troublesome pruritus. The pimples subside in a week or ten days from their first appearance, and are followed by furfuraceous desquamation of the epidermis; but as new crops continue to arise from time to time, the duration of the disease is often prolonged to several months.

Lichen Circumscriptus.

The papules of lichen always manifest a disposition to aggregate in small clusters on the surface of the skin; but sometimes this arrangement is so remarkable as to constitute the leading feature of the eruption. Whenever this is the case the papulæ appear in clusters which have a circular or oval form, the larger pimples forming the boundary of the patch, and the clusters increase in size by the development of fresh papulæ around the circumference, while those of the centre subside and disappear. In this manner rings are formed of various size, and sometimes so large as to communicate with and intercept neighbouring rings, and the whole surface becomes covered by an irregular tracery of curved and broken lines. The more usual seat of lichen circumscriptus is the forearm or back of the hand, the ham, or the breast. The eruption lasts for several weeks.

Lichen Gyratus.

This is a modification of lichen circumscriptus, in which the disposition is not to form circular patches, but narrow bands of various length. Rayer has observed a band of this kind extending, like a necklace, from one to the other side of the neck; and Cazenave and Schedel describe a similar band which commenced upon the breast and ran down the arm as far as the little finger, marking pretty accurately the course of the ulnar nerve.

Lichen Urticatus.

Lichen urticatus is a variety of lichen simplex which combines the characters both of urticaria and lichen. This eruption, which is peculiar to children, commences with the appearance of wheals and nettle-like elevations, which subside in a day or two, and leave behind them a crop of the proper papulæ of lichen. The skin is more highly inflamed than in simple lichen, and the itching is greater and more incessant. Bateman describes the latter symptom as setting in with great severity at night, and by destroying the rest of the patient producing loss of flesh. He observed it in some cases soon after birth; and found it to continue with great obstinacy for many months.

Lichen Tropicus, or Prickly-heat.

Lichen tropicus is the form which lichen simplex assumes in warm climates, and

occasionally in our own during the summer season. It is chiefly remarkable for the intense and persecuting itching by which it is accompanied, and the sensations of the patient are not inaptly expressed in the popular name of the eruption, namely, *prickly-heat*. A description of this annoying affection will be found in the works of all writers on the diseases of warm climates; will, however, read to you a few passages on the subject from the pen of Dr. Winterbottom and that of Dr. James Johnson.

"The prickly-heat appears without any preceding disorder of the constitution. It consists of numerous papulæ, about the size of small pins' heads, and elevated so as to produce a considerable roughness of the skin. The papulæ are of a vivid-red colour, and often exhibit an irregular form, two or three of them being in many places united together, but no redness or inflammation extends to the skin in the interstices of the papulæ."

"The eruption is diffused over those parts of the body which are usually covered, as the neck, breast, arms, legs, and insides of the thighs. It does not appear on the face, excepting on the upper part of the forehead, contiguous to the hair; neither is it ever found in the palms of the hands, soles of the feet, nor on the hairy scalp. The number of papulæ is much increased by wearing flannel, or clothes too warm and thick for the climate."

"A troublesome itching attends the prickly-heat and prevents sleep during the night. There is likewise a frequent sensation of pricking, as if a number of pins were piercing the skin. This often takes place suddenly after drinking a dish of tea or any warm liquor, so as to cause the person affected to start from his seat."

Dr. Johnson remarks, with regard to it,—"This unwelcome guest assails us at all, and particularly the most unseasonable, hours. Many a time have I been forced to spring from table and abandon the repast, which I had scarcely touched, to writhe about in the open air for a quarter of an hour; and often have I returned to the charge with no better success against my ignoble opponent. The night affords no asylum. For some weeks after arriving in India, I seldom could obtain more than an hour's sleep at one time before I was compelled to quit my couch with no small precipitation, and if there were any water at hand, to sluice it over me, for the purpose of allaying the inexpressible irritation. But this was productive of temporary relief only, and what was worse, a more violent paroxysm frequently succeeded."

"The sensations arising from prickly-heat are perfectly indescribable, being compounded of pricking, itching, tingling, and many other feelings for which I have no appropriate appellation."

ESSAYS
ON THE
DISEASES OF THE EYE.

By Edward Hocken, M.D., London.

PREFATORY ESSAY.

I. The Legitimate Manner of Conducting Ophthalmological Study. — Necessity and Advantages of Previous Knowledge of Disease.

By dividing the study of medicine into principles and practice, the student is first instructed in those general laws to which disease is subservient; and secondly, in the affections of particular organs, being illustrations of principles. No one can possess scientific views of ophthalmic disease unless its study be based on comprehensive views of disease generally; hence all was dark and erroneous as long as this department of medicine was monopolised by the charlatan, and it has only within the last few years acquired its present clearness and accuracy. In the eye we may behold a miniature representation of all diseases, for here, says Dr. Latham (Med. Gaz., vol. iii., p. 216), "nature has displayed, as in a glass, all the little intimate details of her own wonder-working powers; her modes of disorganising, and her modes of repairing; and the aids which she receives, and the impediments, she sustains from the right and wrong application of medical agents." From the very vascular and nervous constitution of the eye, its situation, and constant occupation, it is extremely prone to diseased actions, especially those of an inflammatory nature; and, although of comparatively small size, it furnishes some of the best opportunities we possess of observing, inspecting, and tracing in all their stages the pathological states of mucous, serous, fibrous, muscular, and nervous tissues, as well as of some structures that are peculiar to the eye.

Moreover, by a careful investigation of ophthalmological phenomena, we may gain much insight into the nature and process of local diseases in other parts. For instance, by taking the visual nervous system as an example, when suffering from hyperæmia, we may gain an accurate idea of congestions in general; or the nature and peculiarities of local hysteria from the study of hysterical amaurosis. One great advantage in these investigations is that we can bring the sense of sight to follow the steps of the disease in the great majority of instances. We see the vessels enlarge, and parts that were previously white, or transparent, become red with blood. Our sight detects the advance of swelling, the effusion of serum, lymph, or blood, and the gradual loss of transparency and brilliancy, or peculiar colour. It is true that some of the deeper-seated tissues

are less readily inspected during anormal states, although the practised eye can learn much even in their diseases. Take, for example, the retina, which is invisible during health, but becomes visible during disease, so that we can appreciate, readily, the changes which it undergoes from loss of transparency, effusion of lymph, or displacement, by a careful and minute inspection. In fact, we possess, in the eye, a privilege of following the mode in which nature proceeds, of tracing the commencement, progress, and completion of pathological changes, and the effects of treatment, in a manner which we cannot do in any other organ. No other part affords so favourable an opportunity of studying inflammation in all its forms and stages, of tracing the influence of constitutional conditions on local disease, of observing the modifying effects of tissue, and of actually inspecting and following the immediate and remote consequences of treatment.

In other parts of the body we are compelled to wait until after death in order to connect particular symptoms or signs with definite changes of structure or organisation; whilst in many important parts of the eye we can connect these morbid phenomena, with the actual lesions of structure, as they arise and progress, better than if exposed by the knife of the anatomist. We must admit, however, that one great drawback to the knowledge otherwise attainable in the more obscure diseases of the eye is the rarity with which they afford any opportunity of making a post-mortem examination during the progress of the disease, or shortly after the tissues have suffered organic change, so as to connect the detectible alterations with the symptoms during life. For it will be obvious that if no examination of an eyeball be made for several years subsequent to the destruction of its powers of vision, its condition at that time will throw little, if any, light on the primary disease.

Besides an accurate knowledge of disease generally, it is essential for the ophthmological student to be well versed in anatomy and physiology, not of the eye itself merely, but of the whole body. Who could understand, for example, anything of the retina and optic nerve without a general knowledge of nervous structure and function, or of the conjunctiva without a previous acquaintance with the composition and offices of mucous membrane. Indeed, as Dr. Jacob truly remarks (Dub. Med. Press, vol. i., 1840-41, p. 331), "there is not in the whole range of the nosology, a class of diseases which requires more intimate knowledge of the structure and functions of the animal frame, than those which affect the eye."

As diseases of the eye do not differ essentially from disease in other parts of the body, so in their general treatment they require the same regulating principles, although, of course, there are some differences. As has been elsewhere remarked (Brit. and Foreign Med. Review, vol. x., p. 3, 4), the complete analogy is not an *à priori* matter, it is only to be perfectly comprehended *à posteriori*; that is when we are so far acquainted with both classes of disease as to be able to distinguish what is fundamental from what is accessory, and then, excluding the latter, subjecting the former only to our comparison. Pursued in this manner, ophthalmic study illustrates and is illustrated by other diseases. "The points, however, in the pathology and therapeutics of the eye which demand special consideration are so numerous, so complicated, and often so much out of the way of general pathology and therapeutics, that, considering the importance of the sense of vision, a course of medical education cannot be considered complete unless ophthalmology has for some time especially engaged the student's attention. And here we would remark that to study ophthalmology effectively, an extensive and accurate knowledge of anatomy and physiology is the best preparation." (Ibid.)

Whilst on this subject I cannot do better than give a short analysis of a very valuable paper by Dr. Jacob "On Diseases of the Eye as a Guide in the Study of Pathology' (Dub. Med. Press, vol. vii., pp. 225-30), the views in which entirely coincide with my own. He endeavours to show that the study of diseases of the eye is eminently calculated to improve the knowledge of the nature of disease in other parts of the animal frame, and therefore that it is a branch of medical education worthy of particular encouragement, and also an object worthy of the attention of the most enlightened practitioners. The eye is destined to perform an office in the animal economy totally different from that of any other organ. The operation of light on the mind is entirely effected by it, and therefore many of its component structures must be of a peculiar nature, and not only perfectly transparent, but delicately correct in their refracting properties and vascular form. In the eye alone can we examine the composition and properties of the material which forms a cornea, a lens, or a vitreous humour, or study the changes which take place in them from disease. It is by an investigation of the properties of all parts of the living being that we can form a correct estimate of the whole; and therefore it is that an organ which affords several anatomical ingredients of a distinct and peculiar nature, constitutes a valuable object of study and an additional source of information. Wherelse, throughout the body, except it be in the labyrinth of the ear, so difficult of access, can we see the final expansion of a nerve to receive the most delicate impressions to which a nerve is subject? Where, except on the iris, can we contemplate the undisturbed and uninter-

rupted action of muscular structure, called into operation by delicate impressions and complicated associations? It is in the chambers of the eye alone that we can see the production or removal of a fluid in exact proportion to the space it is to occupy, and there only the decisive proof of the influence of vitality distinguished from mere physical agency. It is also in the flow of tears from the lachrymal gland we have the most direct and convincing proof of the effect of emotions and passions on glandular secretions, whilst in no other part of the body have we such perfect ocular demonstration of the modifications of mucous membrane, as in the conjunctiva,—villous, glandular, and red-blooded on the inside of the lids; thin, tough, and smooth, over the exposed part of the sclerotic; and transparent, soft, and polished, where it covers the cornea.

As the light producing vision can only pass through transparent parts, we are enabled to observe the organisation and properties of the structures beneath, under the most favourable circumstances. Thus we can contemplate the changes in the minute blood-vessels from any source of irritation, and here alone ascertain that the vessels of transparent parts admit colourless fluid under ordinary circumstances, but when stimulated or irritated receive red blood in abundance. We examine the foot of a frog, the tail of a fish, or the wing of a bat, to ascertain the state of the circulation in the smaller vessels, but we might observe the same much more distinctly on the surface of the sclerotic, through the transparent conjunctiva, or in the iris of the albino or white rabbit. In enumerating the instructive lessons to be derived from the observation of the actions of the iris, the effects of belladonna on the pupil must not be forgotten; the influence of a narcotic poison on the functions of an organ through the nerves is here unequivocally displayed, and the importance of the fact that such influence can be thus exercised is unequivocally proved.

If physiology can derive illustrations and explanations from this source, pathology can borrow still more largely. It must be admitted that the opportunities of observing the condition of the true mucous membranes, in a state either of health or disease, are few indeed during life, and it cannot be denied that conclusions drawn from observations made after death must necessarily be of doubtful value, whilst the most delicate changes may be seen with facility on the surface of the eye and the inside of the eyelids. For it is obvious that much juster conclusions may be drawn from observations made during life, and when the diseased structure is seen under every advantage as to period and variety of condition, than can be obtained from the mere appearance of parts after death, than which nothing can be more fallacious. The inflammatory redness of mucous membrane may be seen in conjunctivitis from the first blood-shot, as it is called, to the final conversion into a surface of uniform turgid redness. There is a consequence of inflammation of mucous membranes scarcely to be seen during life, except upon the conjunctiva, and yet it probably occurs frequently; viz., effusion of serum into and beneath the membrane, in the eye termed chemosis. Œdema of the glottis appears to be of this nature, and the patient perishes from it, because no depletion can diminish the swelling which mechanically obstructs the passage. The alterations of mucous secretion can also be better studied here than elsewhere; the observer has only to open the eyelids in ophthalmia to see the secreted matter on the very surface which produces it, and to ascertain the exact period at which it makes its appearance, and at which it ceases to flow. It must be admitted that a correct knowledge of the state and nature of the secretions of inflamed mucous membranes is of great importance towards an accurate diagnosis and prognosis, yet the information respecting them is very imperfect, and erroneous conclusions abundant; this information can be acquired, and these errors corrected, in part, at least, by an accurate examination of the conjunctiva. The various affections of the conjunctiva, lids, lachrymal organs, &c., all afford an abundance of interesting, curious, and instructive forms of disease, not less valuable because on a small scale, nor less important because they are peculiar.

Careful observation of the effects of inflammation and injuries of the cornea will go far to prove that the notion of transparent and colourless parts being less perfectly organised, and less under the influence of vitality than other structures, is an erroneous one; and if so, that the theories and practice founded on it are mischievous. That colourless parts are destitute of vessels is utterly unfounded. The cornea, a peculiar animal texture, eminently transparent, and not admitting a particle of red blood into its vessels, exhibits powers of reparation and growth, not only equal but superior to those of other parts remarkable for the quantity of red blood circulating in them; no part uniting by first intention so frequently, or under circumstances apparently so unfavourable as this colourless texture. The pertinacity with which wounds of the cornea heal when it is punctured in various diseases, is quite remarkable. If any would embrace a favourable opportunity of studying the process of ulceration, let him watch the cornea when affected by slough, abscess, or spreading ulcer, and undergoing the various changes of healing, till final cicatrisation.

The iris affords a beautiful opportunity for accurate observation, and when inflamed presents appearances which the pathologist can recognise in no other situation. The

change of colour from increased vascular turgescence, or from purulent or other depositions; the distinct abscess, or globule of lymph; the impaired power of contraction, and irregularity of the pupil, are all beautiful and instructive phenomena; but the adhesion of the margin to the capsule of the crystalline lens is still more remarkable; for we find the pleuræ, &c., adherent after death; but in the eye we see the surfaces unite, although immersed in fluid, and scarcely coming into visible contact. No better example is to be found of the direct and unequivocal action of a remedy on disease than that of mercury in syphilitic iritis. The very day, nay, perhaps the very hour, the metal becomes part of the system, its power is triumphantly displayed. Taking the lining of the chambers as an illustration of serous membranes, we have a living proof of what is supposed only to be going on in other places, and of which there is no certain proof till after death. (It is true, however, that in other serous membranes the sense of hearing will give us almost as much information as the sense of sight.)

The lens affords an opportunity of observing alterations not to be seen in other parts of the body. The loss of its transparency, or cataract, from whatever cause it arises, is a form of disease new to the pathologist when he first observes it. The varieties of cataract are much greater than are generally supposed, so much so that it is difficult to account for them, when we recollect the causes to which they may be traced. The effect of age in inducing colour, loss of transparency, and induration, is well seen in the hard, amber cataract of advanced life; while the soft, watery, opake lens in childhood, reminds us of the healthier state of the system at that early period. The different lengths of time required for the absorption of cataracts broken up by operation, according to age, sex, and vital energy of constitution, are surprising. In the young and healthy they disappear rapidly, but very slowly in the aged and infirm. A curious fact noticed frequently by Dr. Jacob is that cataracts, with every advantage, are singularly slow in disappearing in females about fifty.

The optic nerve is more favourably circumstanced than any other for observing the condition of the nervous system in a state of health or disease, and the retina presents a better index of the state of the brain, when implicated in other affections, than any other sensitive surface. Defective vision, &c., are eagerly inquired after by the observant practitioner, where the head is supposed to be engaged, reminding him that other organs may have their functions seriously impaired by similar causes. Trifling derangement of other senses are scarcely perceived, even by the patient himself, but the slightest disturbance of vision excites alarm. If vision can be impaired from asthenic conditions of the system, the practitioner should bear in mind that other nervous functions may be impaired from similar causes. Here we can learn much, also, of neuralgic, spasmodic, and paralytic diseases in general, by observing morbid conditions of winking, spasmodic squint, loss of sight, paralytic conditions of the muscles, and neuralgia of the iris. From our being able to distinguish the nerves of sensation from the nerves of motion in this situation more perfectly than in others, the various shades and forms of neuralgic disease may be more easily traced to their source, and the seat of the disease more easily determined. And, lastly, in no other part of the body but the eye can it be shown that interruption of the functions of a nerve interferes so seriously with nutrition as to lead to the destruction of the part supplied, but the cornea becomes inflamed, and sloughs from disease or division of the fifth nerve. (This is but the cream or essence of Dr. Jacob's paper; the whole, however, is well worthy of attentive perusal.)

In conclusion, I would remark that many of the diseases of the eye are identical with disease in other parts of the body: thus catarrhal conjunctivitis is identical with catarrh of the Schneiderian membrane, gonorrhœal ophthalmia with gonorrhœa, granular disease with granular inflammation of the cervix uteri, &c.; but it would be absurd to consider that the generality were so, for nearly the whole are greatly modified by local peculiarities, and there are not a few quite distinct and separate.

II. Examination of the Eye in Disease.

In the diagnosis of ophthalmic disease, accurate examination of the affected organs is almost always of the utmost importance, and as this cannot often be effected unless the practitioner proceeds with extreme delicacy and skill, a few remarks on the subject may not be misplaced here. However well versed in general practice, if a man be not accustomed to examine diseased eyes, he is almost sure to defeat his own object by his manner of conducting the examination; and if this be the case with the well-informed, we can imagine the awkwardness, violence, and absurd manner of the ignorant. Mr. Middlemore (Treatise on the Eye, vol. i., p. 88-9,) mentions that in a case of extraction, nine days after the operation it had proceeded so favourably that few would have judged any operation had been done, unless attention had been expressly directed to the circumstance, but happening to show this case to a surgeon from the country, he handled the eye so roughly as to cause great pain, followed by very severe ophthalmia. Beside unnecessary roughness and violence, inexperienced persons are apt to place patients in the direct glare of light from a window, &c., and to be extremely awkward in managing the lids, pressing on the eyeball

instead of gently raising or depressing the upper and lower eyelids.

It is the best plan to gain all the information possible, by carefully inspecting the outside of *the lids*, their edges and angles, and the exposed parts of the *eyeball*, before we touch the eye at all; for in this manner we often gain very valuable hints, and can often see the eye, where there is much intolerance of light, when it would be difficult or impossible to do so in any other manner. In strumous ophthalmia, for example, we can often catch a fair glimpse of the front of the eye when the child is looking over its nurse's shoulder, quite unsuspicious of any examination going on, or, in the affections of adults, while conversing with them on some other topic. In all diseases attended with intolerance of light the patient should not be *exposed* to a direct or very powerful glare, but be so situated as to enable the practitioner to see clearly, and to throw an oblique light on the organ to be examined.

In the great majority of instances it is necessary to *separate the lids*, and in some cases to *evert* them. As in all other operations there are right and wrong methods of proceeding. "It may seem absurd," says Mr. Morgan (Lectures on Diseases of the Eye, p. 24), "to suppose that any medical man in his senses would throw a stimulating injection into the eye as a preparatory step to separating the lids, and obtaining in that way a view of the inflamed globe. Yet many are producing now and then the very same effect as that which would result from such a proceeding by different means. This effect is occasioned by the manner in which many a novice is in the habit of opening an inflamed eye." Mr. Morgan gives plates of the usual modes in which bunglers make the attempt; in the first each thumb is placed on the tarsal cartilages, pressing with force on the globe, and rubbing the inflamed surfaces together; in the second, elongated finger-nails are insinuated between the lid and globe, and the inflamed surfaces clawed asunder.

The proper plan of *separating* the lids, in all ordinary cases, is to raise the upper lid first, and in some cases to depress the lower subsequently, by placing the thumb horizontally below the eyebrow, taking care that its lower edge is not placed as far down as the tarsal cartilage, and drawing the lid upwards by the external skin, by which means thus it is raised and separated from the globe, preventing the inflamed surfaces rubbing over one another, and all pressure on the eye itself. In depressing the lower lid the point of a forefinger or thumb should be placed vertically about its centre, below the tarsal cartilages, and the lid drawn down and slightly everted by its integument. I have found this plan of proceeding better than raising the upper and depressing the lower lid at one and the same time.

When much swelling of the conjunctiva and lids are present, the foregoing plan may either cause inversion of the lids, or prove quite inadequate to expose the globe. Under these circumstances it may be necessary to act differently in raising the upper lid; the extremity of the finger or thumb must be brought vertically to the centre of the tarsal cartilage, the edge of the nail being below its margin, and beneath the eyelashes (not hooked between the lid and globe), and in this manner the cartilage is to be pushed upwards towards the edge of the orbit, raising the lid slightly from the conjunctiva oculi, and making no pressure on the eyeball.

A third plan may be necessary in children, viz., the forcible separation of the lids. The child should be seated in the nurse's lap with its back towards the practitioner, who then lowers the head and places it firmly between his knees, so as completely to steady it, whilst the nurse keeps the arms, body, and legs as still as may be, for the child often struggles most violently.

As a general rule, we should not attempt to examine the eyes of children whilst they are crying, or resisting powerfully, but an opportunity should be taken of quickly and easily raising the upper lid, either whilst they are asleep, or are quiet and unsuspecting. It is only in older children who cannot be thus treated that forcible separation becomes necessary. Dexterity and adroitness are only to be acquired, however, by a little experience and observation, which the intelligent student will soon gain.

The best plan of separating the eyelids in many operations on the eye is to place the extremity of one or more fingers on the tarsal part of the lids, bringing the edge of the nails against their margins, and carrying the lids in this position against the orbital edges. In this way the lids are raised slightly from the globe, and therefore no pressure can be made on it, whilst the eyeball is fully exposed without inducing any irritation.

To *evert the lids* nothing more is requisite than to place a probe horizontally across them, above the tarsal cartilages, and to press downwards with a gentle force, whilst the edges of the lids are drawn upwards by the lashes. Where we merely wish to inspect the conjunctiva of the lid, without inverting it, we can do so by lifting it off from the globe by the cilia, and holding it at a moderate distance; in the lower lid it is sufficiently exposed by merely drawing downwards by the integument. An eye should not be exposed for too long a period, nor too frequently examined, especially after an accurate view has been already obtained.

In many diseases, especially those of an amaurotic character, we wish to ascertain if the globe be either morbidly tense, flaccid, or healthy; to do this the patient closes the

lids, and we examine, by the touch, its degree of resistance, placing the thumb on one, and the forefinger on the other lid, and comparing the state of the two globes with one another, and with that of an healthy organ.

In those diseases of the eye which affect the more superficial parts the observer should look not only at the organ directly, but also with some degree of obliquity; for, frequently, ulcers of the cornea appear as mere opacities if we directly face the patient, but, viewed obliquely, the breach of surface is readily apparent. So, also, if we look directly at the cornea, it is difficult to tell whether the capsule of the aqueous membrane or the cornea itself be cloudy, but no such difficulty exists if we view these parts obliquely.

In ordinary cases it is not necessary to *close one eye* whilst we examine the other; but in all cases of suspected amaurosis we should direct the patient to do so, and cover the organ with his hand; for it is necessary to recollect the physiological fact, that if one eye be sound the iris of the blind eye will move, in some degree, in accordance with the motions of the sound pupil. In all these cases the pupil of the amaurotic eye will dilate if the sound eye be closed, becoming dilated to its full extent if the light be still further obstructed by placing the hand over the eyelids of the closed eye. Again, where we have a case of simple imperfection of vision, with a dilated pupil and an absence of the ordinary constitutional and local symptoms of amaurosis, it is well to make the patient *look through a small clean aperture in a card*, in order to distinguish mere enlargement of the pupil from nervous imperfection of vision.

In all the deeper-seated diseases of the eye, attended by cloudiness of the humours, the eye should be examined whilst the pupil is dilated from the influence of belladonna; placing the patient in a good light, and looking towards the bottom of the eye both directly and obliquely. It is in these cases that what has been termed the *catoptrical* examination of the eye (this method was first discovered by M. Purkinje, of Breslaw, but came into general use from a clinical lecture by M. Sanson) is so useful. It is thus conducted:—

The pupil being dilated by belladonna, a lighted taper is to be held at a short distance from the eye, in front of the pupil, moving it slowly from side to aide. The flame should burn steadily, or, in some cases, we shall find the bright wick of a candle, the flame of which has been blown out, most useful. Under these circumstances we observe three reflected images of the light in a sound eye, or in an eye where the cornea, lens, and its capsule, retain their transparency and brilliancy. Of these, two—the anterior and posterior—are erect, whilst the centre one is inverted. The erect images follow the motions of the candle, but the middle inverted image, which is smaller, duller, and less distinct than the others, moves in the contrary direction. In fact, unless we move the light steadily from side to side, it is difficult to see the centre inverted image at all. The anterior erect image is a reflection from the cornea, the posterior one (erect) is from the anterior surface of the capsule of the lens, and the middle or inverted image, a reflection from the concave or posterior surface of the crystalline capsule. The anterior one is always seen as long as the cornea remains in a healthy condition; the posterior erect and the middle inverted images are lost if the anterior surface of the capsule or the lens itself be opake, whilst only the middle inverted one disappears provided the posterior capsule alone be affected. The inverted and the deep erect images are very speedily obscured and then obliterated by lenticular cataract, whilst the images are unaffected in simple amaurosis. In making this examination the practitioner should face the light, and look downwards and backwards at the eye of the patient, who should be seated with his back to the light.

III. General Principles of Diagnosis.

Reserving special points of diagnosis for those chapters and sections where we shall discuss separate diseases and their varieties, I shall make a few general remarks in this place. I shall commence with the *types of vascularity*. In the inflammatory diseases of the eye the injected vessels occupy different *situations*, have different *extents*, and vary in *colour* and *arrangement*, according to the parts involved. As regards situation, in the affections of the globe itself, the vessels form a limited circle or zone around the cornea, evidently beneath the conjunctiva, whilst in conjunctivitis they are situated in the conjunctiva itself, and move with that membrane. Extent is of great importance in diagnosis; for whilst the uncomplicated inflammations of the textures of the eyeball are attended by a circle of vessels limited to the situation immediately surrounding the cornea, in general inflammation of the conjunctiva they extend over the whole conjunctiva of the eyeball and lids. Again, in both instances, as long as the cornea remains unaffected, the vessels never pass beyond the junction of the cornea and sclerotica, but in the inflammations of the cornea itself they transgress this boundary, and ramify to a greater or less extent on its surface.

In the arrangement of vessels four varieties have been distinguished, viz., the *reticular*, the *fascicular*, the *varicose*, and the *zonular*. The three first are peculiar arrangements of the conjunctival vessels, and the latter of the anterior ciliary. The term "reticular" is used to denote the vascular network which the numerous anastomoses of the main conjunctival vessels form in all

the ordinary inflammations of that tunic. In all the severer inflammations the interspaces are filled up by smaller and less perceptible vessels, so as, in some cases, to give an uniform appearance. By moving the lids these vessels are readily seen to follow the motions of the conjunctiva. Sometimes, however, the redness is limited to a mere *fasciculus*, or bundle of vessels, as occurs in acute strumous conjunctivitis, where a few irritable-looking trunks arrange themselves in a somewhat triangular manner. The apex of this triangle is at or near the edge of the cornea, being formed by a small acuminated vesicle, or (this having burst) ulcer, whilst the base spreads out in the conjunctiva oculi. The *varicose* vascularity is formed by the tortuous, enlarged, and distended branches, seven in number, which come from the recti muscles, which carry red blood, and are more or less marked in every healthy eye. This form is seen in the deep-seated and chronic congestions and inflammations of the globe. The last variety is the *zonular*, which consists of a circle (either uniform or especially marked in one or more points) formed by the accumulation of a number of exceedingly fine, small, straight, vessels (not branching or anastomosing) around the cornea, which terminate a short distance from the junction of the cornea and sclerotica, and, when intense, leave a white ring intervening. The vascularity is most marked towards the cornea, being gradually and imperceptibly shaded off externally. The conjunctiva may be moved over these vessels without disturbing their arrangement.

The *colour* of the inflamed vessels, and the kind of *pain* experienced by the patient, vary also in the affections of the globe and conjunctiva. The reticular and fascicular arrangements are *scarlet*, the varicose *purplish*, and the zonular *pink*, or a *pinkish salmon colour*. In conjunctival inflammation the pain is *superficial and burning*, attended with a feeling of sand in the eye; whilst in the affections of the globe the pain is deep-seated and severe, occurs in paroxysms, and is accompanied by pain over the brow, which latter is always increased towards night.

It is sometimes necessary to distinguish *real* from *feigned* diseases, or *natural* from those *artificially* produced. Amaurosis is the disease most frequently feigned, and inflammation, with some of its effects, that which is most frequently produced artificially. In all suspected cases we must take into consideration the situation the individual holds in society, and the inducements he may have for deception. Such persons are usually either children, apprentices, members of benefit clubs, or soldiers and sailors, and deceive either to be freed from employments they dislike, to obtain money, or, in the latter case, to gain their discharge, or a higher pension than they would otherwise be entitled to.

In feigned blindness we may generally detect the imposition by the perfectly healthy appearance of all the textures of the eye, the absence of orbital and head symptoms, and the normal condition of the general health. Unless the impostor be acquainted with the properties of belladonna, hyoscyamus, &c., the pupil will be natural, and move readily from the alternation of light and shade. In all these cases both eyes are said to be affected, as the object of the individual would not be gained unless all useful vision were supposed to be lost. From the cat's-eye amaurosis of Beer, such cases may be distinguished by dilating the pupils by belladonna and viewing the fundus in different lights; from the other forms of amaurosis, by the absence of slight loss of correspondence in the axes, or of strabismus, which almost always accompanies severe cases; by the healthy character of the globes, freedom of motion in the irides, and the incorrect congregation of symptoms which the patient describes.

Where belladonna has been used the diagnosis is more difficult; here we should carefully avoid exciting suspicion in the mind of the person examined, lest he become alarmed and constantly on his guard. Where the individual really sees, and does not strive voluntarily to overcome the feeling, he will close the eye rapidly, or wink, if anything be brought near the organ, and which seems about to touch it; on the contrary, if he be blind, the lids do not move till they are actually touched, or the eyelashes disturbed. By engaging the person in conversation he will sometimes direct his eyes at the countenance of the speaker, or in the situation of a third party suddenly appealed to, very different to the absent stare of the blind. Where detection is very difficult, Mr. Tyrrell (Treatise, vol. ii., p. 326) says that he has succeeded immediately by the following means: — During conversation dropping something suddenly, which has been immediately picked up by the patient; pretending to see something curious in the room or out of the window, the patient has, for a moment, been unguarded, and his eyes have followed the direction pointed to; asking how the patient's dress became torn or soiled, his eyes have immediately been directed to the part mentioned; and several other like expedients. In the case of a little girl, Mr. Tyrrell promised her sixpence if she would take her medicine well; she assented, and Mr. T. held out a halfpenny towards her, which she directly declared was not a sixpence, without touching it, although she had previously sat for hours together without moving, and would allow the finger, or other matter, to be brought in contact with the cornea without flinching. Keeping sus-

pected individuals on short allowance for a few days, and then placing some tempting food in the room, leaving them alone for a short time, will often succeed.

When we have reason to suspect soldiers of artificially inducing inflammation or injuring their eyes, the suspicion will be naturally increased if the disease be almost exclusively confined to privates or non-commissioned officers, without either attacking the commissioned officers, the women, or children; also by the disease being confined to one eye, and that almost always the right. (Mackenzie's Pract. Treat., p. 522, edit. 3rd.) In some cases it is possible to detect the means employed. Acrid powders introduced between the lids produce a peculiar train of symptoms, and may often be found on some of the conjunctival folds. Mr. Marshall (Hints to Young Medical Officers, &c., p. 112) once detected a patient with a piece of black muslin spread over the cornea of the right eye. Acids act chemically on the conjunctiva and cornea, rendering them white and swollen, the changed part readily peeling off. The eyelashes, also, are sometimes plucked out, and caustic applied along the ciliary margins. M. Carron du Villards states (Guide Pratique, &c., p. 222) that he knew a man, unworthy of the name of a physician, who made an enormous fortune by artificially producing specks of the cornea in young persons liable to be drawn into the military service.

In forming a diagnosis of any disease it is necessary to learn what are the phenomena or symptoms produced, and also that the practitioner be previously acquainted with the proper import of these symptoms. In the diseases of the eye, as in other cases, it is well to gather all the phenomena in a methodical manner, both what we can learn of the case by our own observation and what we gather from the description given by the patient and friends. *Objective* symptoms are such as we can learn ourselves, without one word of explanation from the suffering party, and consist of the *appearances* of the diseased parts, and of the *changes* which disease may have effected in them. *Subjective* symptoms, on the contrary, can be learned only from the patient himself and the friends who have constantly attended to his complaints, &c., and these consist of *sensations*, as uneasiness, pain, &c., and of disturbed *functions*, such as defective vision, appearances of motes or sparks flying before the eyes, and the like. Besides the mere local symptoms it is necessary to inquire into what are termed sympathetic, those, namely, which are secondary to the original disease, and dependent upon it, such as the pain over the brow, &c.,; and, secondly, into the general or constitutional disturbance, with the state of the vascular and nervous systems. Of these various symptoms some are expressive of their nature, and some only of the parts they occupy. The first, as Dr. Latham states (Medical Gazette, vol. 3rd, p. 152), flow directly from their essence; the second are derived from the disturbed functions and sensations of particular organs. This distinction between essential and accidental symptoms is of great practical importance; essential symptoms bring placed within the scope of clinical diagnosis, and within the compass of rational treatment. Accidental symptoms only discover where they are, not what they are, or how they are to be treated. For example, we may learn that the conjunctiva is inflamed from the ordinary local and general symptoms; but we must consult the colour and appearance of the blood-vessels, and the state of the general health, to arrive at proper indications for treatment. So, also, in amaurosis, the defect of vision informs us that the visual nervous system is the part suffering, but we must consult more definite symptoms to know how to treat it; for in one case it may be necessary to bleed generally, and to place the patient on a strictly antiphlogistic regimen, whilst in another, nutritious diet, malt liquors, and tonics, are equally demanded.

Hence, when notes of cases are taken, I have found the following plan advantageous:—First to learn as much as possible of the patient's *previous history*; secondly, to inquire into the preceding and *incipient* symptoms; thirdly, to learn all that is known of the *predisposing* and *exciting* causes; fourthly, to examine into the *present* symptoms, arranging them into *objective* and *subjective*, viz., *local appearances* and *changes*, *sensations* and *functions*; the constitutional into *febrile* and *sympathetic*, with the conditions of the general *vascular* and *nervous* systems; fifthly, to make an attempt at *diagnosis*, and the ascertainment of the *pathology*; sixthly, to gather from this the indications for *treatment*; seventhly, still further to trace the case under the headings of *progress*, *results*, and *terminations*, the general and local *effects of treatment*, and the mode and peculiarities of the employment of *remedies*.

IV. Law of Identity.

Whenever both eyes become simultaneously or consecutively diseased they are subjected to a general law, viz., that of an exact identity in the parts affected in both eyes and in the character of the diseased actions; whether the disease arises from some general cause, which engages both organs at the same time, or from sympathy, as it is termed, of one globe with its fellow; or whether it arise from injury or idiopathic derangement. This law will be found to regulate the simultaneous and consecutive affections of the globes in three particulars,—First, that the identical tissues, or parts,

are engaged; second, that the very identical portions of such tissues, or parts, suffer together in these diseases; third, that the characters and peculiarities of morbid phenomena are also analogous or identical.

These facts apply to all and every disease of the eye, so that a few illustrations will be sufficient. If we take a case of conjunctivitis which has attacked both organs, we find that the characters of the disease are similar in both, for they agree in vascularity, secretion, pain, &c., and similar parts are simultaneously affected. We have proof of this in cases where portions only are diseased, such as happens in palpebral conjunctivitis, for in both eyes the conjunctiva of the lids suffers without inflammation of the conjunctiva oculi. If a cataract form in one eye we know that a cataract, and not any other form of disease, will appear in the other; or, if we find a soft whitish cataract in one, it is sure to be identical in the fellow eye; if dark in one it will be dark in the other; if the capsule only be opake in one, it alone will be opake in the other; but if both capsule and lens be diseased in one, there will be a capsulo-lenticular cataract in the other. Again, if the posterior or anterior surfaces of the capsule alone be affected in one eye the disease corresponds in the opposite organ; so, also, if the opacity be in spots or streaks, or uniformly diffused, or commences either in the nucleus or circumference of the lens, it presents the same appearance, and follows in the same course, when the second eye becomes cataractous.

Where an eye has suffered from a severe injury, or has been lost from inflammation, if the disease remain unsubdued for any length of time, sympathetic disease is apt to be set up in the opposite organ, of a most insidious and dangerous kind; but it follows in the steps of the primary ailment most faithfully and exactly. I may now, in conclusion, inquire, What are the reasons of this peculiar sympathy, and what the causes continually in operation?

Symmetrical parts of the body are connected by a peculiar bond of union, both in their primary development and in their diseases, when such affections arise from constitutional causes. The two eyes, however, suffer together when the disease has no connection with the state of the system, as well as when it is manifestly the originating cause, proving that although their sympathetic connection may be strengthened by constitutional causes, it is distinct and independent, and a power which binds them to one another by a much closer tie than is exhibited by any other two organs in the body. Every individual has a constitution peculiar to himself, be it healthy or diseased, under the influence of which any two inflammations originating in the body would probably exhibit an identity in character and peculiarity, especially when we bear in mind that the same predisposing causes are in operation. This consideration, with the intimate vascular and nervous communications which exist between the two eyes, may perhaps account for the law of identity which connects the tissues in so remarkable a manner with each other.

V. Varieties and Characters of Inflammation.

In the inflammatory affections of the various tissues of the eye I shall have to speak of *active* and *passive* inflammations, of *acute* and *chronic*, of *irritative*, *healthy* and *unhealthy*, *common* and *specific*, and I would explain the meaning I attach to these terms: they involve no theory whatever of the pathology of inflammation. I mean to assert that inflammation may assume either an active or passive form in any organ or part from either constitutional or local causes, or from the specific nature of the exciting agent, being distinguished from each other by constitutional and local symptoms. In the active form there is bright scarlet vascularity, tension, pain, heat, actively disturbed functions, and pulsation; in the passive, dark purple or livid discoloration, distention of vessels without pulsation, considerable swelling and relaxation, rarely tension, rarely much heat or pain. The constitutional symptoms in the first case are those of synocha, or inflammatory fever; in the second either depression and derangement of the general health without fever, or a type of fever below the standard of inflammatory, with every intermediate grade to complete prostration of strength and typhus. It will be obvious that in this sense the terms active and passive denote only the *character* of the inflammation, and hence have no reference to its duration. I restrict the terms acute and chronic to the *duration* of the disease, and in like manner, as in the former instance, mean to denote no character it may possess; for however slow an inflammation may be, it may be active in its characters, or however rapid, it may still present passive features. Irritative inflammation denotes an excess of nervous irritation in the inflamed parts, and is often connected with a tendency to hectic fever, as in the peculiar conjunctivitis of nurses who are suffering from undue lactation, and in strumous or phlyctenular conjunctivitis. The terms healthy and unhealthy, common and specific, refer to the process as seen in normal and abnormal conditions of the health, the latter to inflammation modified by some specific cause, as gonorrhœa, rheumatism, syphilis, or scrofula, &c.

Instead of contending about the presence or absence of increased action, or of weakness in the capillaries, it would be much more to the purpose if we considered the actual combination of morbid states which

constitutes inflammatory orgasm. Lesions of innervation and of circulation are always combined, and the consequences are lesions of nutrition, whether the primary aberration from the natural condition of nervous state arise from injurious matters circulating with the blood, or other disturbances of the same, or originate in causes acting on the nervous system, and secondarily affecting the blood-vessels and blood. The characters of an inflammation, when of sufficient extent, determine the phenomena of the constitutional disturbance, still very rapid and destructive inflammations may progress during great prostration or a typhoid condition of the system.

VI. General Principles of Treatment.

The considerations which I wish to impress especially on the minds of my readers, are that diseases of the eye require the same principles of treatment as they would require if situated in any other part of the body, employing a common-sense view of the case, and not a mere routine list of remedial measures; in fact, to treat diseases of the eye successfully it is as essential to be guided by age, sex, peculiarities of constitution, conditions of the general health, local derangements or diseases, as well as the character, duration, &c., of the ophthalmic affection, as it is in diseases of any part or of the whole body. The use of general bloodletting is beautifully seen in conjunctivitis and iritis, &c., of active character and acute type, but is as hurtful in atonic conditions of the system, and in passive cases, as it would be in some forms of erysipelas, &c. Carrying general and local detractions of blood to an unnecessary extent is often highly injurious by greatly protracting the period of convalescence; hence, in many of these cases, the patient is most rapidly cured by tonics and good diet, who would have gone on for months and months under the treatment of some routine or bigoted practitioner. Even in these examples we can only judge what is the best plan of treatment by attending to the actual conditions of the case, the history, and the general and local symptoms. We may meet with two cases of ophthalmia of equal duration, but we must not on that account pursue a routine course for "chronic" inflammation; for one case may present passive features, with a deranged and depressed condition of the general health, whilst the other may be active, with inflammatory fever. A routine practitioner does not trouble himself about these differences,—he either depletes or stimulates both; one is cured, whilst the other is rendered inveterate under his hands.

An important fact, however, to be borne in mind is, that many ophthalmic inflammatory affections are surprisingly benefited by a change of treatment, when the same measures have been continued for any length of time. Numerous cases will get well under a simply soothing plan, which have resisted strictly antiphlogistic and stimulating measures for a long time previously.

As regards local applications, strong solutions of the nitrate of silver, or this remedy in substance, applied to the conjunctiva, invariably do harm, and are highly censurable except in purulent conjunctivitis, with an abundant secretion, and even in this disease I have found strong astringent solutions, at all events, equally efficacious. The application of the nitrate of silver to the *outside* of the lids, which I have recommended in many cases of simple and complicated conjunctival disease, is a very different plan of proceeding to its direct introduction between the lids. I have seen the greatest injury result from the latter, and, if myself the patient, should decidedly refuse my consent to be so treated.

Weak solutions of the nitrate of silver (as one or two grains of the salt to an ounce of rose-water) are, however, often beneficial as local applications in many superficial affections

As I shall have to mention individual remedies, their indications, strengths, mode of use, &c. &c., hereafter, I shall omit any allusions to them here, since it would be an unnecessary repetition to consider their general indications apart from the diseases in which they are used.

In conclusion, I would remark, that whenever the lids adhere from the conjunctival secretion drying on the tarsal margins, either a simple or a slightly stimulating ointment should be occasionally smeared along them to prevent this occurrence. Belladonna, also, should be used in all the simple and compound inflammatory affections of the iris, to dilate the pupil, and to prevent or remove adhesions to the crystallised capsule, smearing it in the state of moistened extract over *the brow* whenever there is much *irritability* of the eye and conjunctiva, or dropping a solution *between the lids* when these morbid conditions are *absent*.

Bloomsbury-square, July, 1843.

SUCCESSFUL APPLICATION OF THE CHLORIDE OF LIME TO A CANCEROUS BREAST.

To the Editor of The Lancet.

Sir,—That one fact is worth a thousand theories was never more fully manifested than in the following case, which I venture to submit for insertion in your valuable and important Journal:—

In February last I was requested to see an unmarried lady, aged 43, residing at Lambourn, in the county of Essex. She complained of pains in her stomach and side, general lassitude, and debility; loss of appe-

tite, restless nights, frightful dreams, parched mouth, and constant thirst; sinking sensation at the stomach, her bowels generally irrregular, sometimes constipated, at others relaxed, with yeasty evacuntions, and defective of bile; the urine muddy, dark-coloured, and depositing a brownish sediment; skin dry and horny. The uterine functions had been irregular and unhealthy for the last two years; frequent discharges of blood from the rectum; great tenderness and hæmorrhoids. She was nervous and dejected; the pulse weak and feeble.

Reviewing, as I did, all these symptoms with interest and attention, I could not but conclude that this was a case of dyspepsia in its aggravated form and character, and therefore directed my remedies in the most careful manner, commencing with the fullest depletion of the stomach and bowels. I afterwards ascertained that she had been suffering from pains in the right armpit and breast, and on examination was shocked to find a considerable glandular swelling in the axilla, and a large tumour in the breast, of a most decided cancerous character. Ulceration had commenced round the nipple, and although she had perceived the induration gradually enlarging for two years previously, yet had never disclosed this to her family. The communication, as may be imagined, was most painful. Happily, operations are not now deemed advisable, for I believe that any increased excitement would only have superinduced increased morbid action, for its malignant character could not be mistaken. However, I persevered in the plan that I first suggested, which was to regulate the functions of the digestive organs by a mild alterative mode of treatment, with strict attention to a light nutritious diet, consisting of animal and farinaceous food.

The disease continued increasing, ulceration and sloughing were more extensive, including the nipple; and the centre of the breast became so hollow that the thumb might have been passed into the cavity; the surface of the wound was more unequal, and the edges were harder, more rugged, and painful, with a profuse discharge of a thin ichor, of so fetid a character that every means were adopted to counteract it; the axillary glands became more enlarged and painful.

She remained in this deplorable condition until the beginning of May, persevering most rigidly in the plan of treatment prescribed, when, with a view of counteracting in an increased degree the rapid disorganisation that manifested itself, and also of rendering her existence more tolerable, I directed a solution of chloride of lime to be immediately applied to the breast, and constantly repeated, together with warm bread and water poultices. The destruction of parts appeared checked. The discharge and fetor became much diminished; healthy granulations gradually arose, and as her general health became more and more improved, which every week effected, the wound continued to heal, the pains and glandular swellings diminished, and at this time my patient is capable of taking exercise to an extent that previously fatigued her. Her dyspeptic symptoms have vanished, and it is fair, I think, to infer that with attention to the management of her digestive functions, although carcinoma may not be exterminated from the system, yet that life may be prolonged, with all its enjoyments and comforts, and a formidable disease, distressing and painful in all its characteristics, be brought under the power and control of the medical art. This case also serves as a striking illustration of the potent effects of indigestion, for truly did the local disease become an index of the improved state of the digestive organs. I am, Sir, your faithful servant,

G. R. Rowe, M.D., F.S.A.

Chigwell, Essex, July 30, 1843.

PARAPHYMOSIS CURED BY COLD AFFUSION.

In 1834 a French soldier was received into the hospital at Nismes for paraphymosis consequent on a blennorrhœa of the most intense kind, and which had lasted for a fortnight. Previously to the man's reception, the regimental surgeon had attempted the reduction of the evil by scarifications, &c., without success, and other ordinary means were adopted by the hospital surgeons to as little purpose. The glans penis was swollen, dark-coloured, and acutely painful. The application of cold was now thought of, and made in the following manner:—The patient was seated in a chair, and the operator in front of him, raising the organ affected between his thumb and forefinger. A stream of cold water was now let fall from the height of about a yard, upon the glans, which in a few minutes began to lose its high colour, and diminish perceptibly in size; and in five or six minutes from the commencement of the process, the organ was so much smaller that reduction became easy. Since the period named (says the Journ. de Conn. Med. Chir.) the surgeons of the Nismes hospital have always had recourse to the douche, as above, in cases of paraphymosis, where reduction was unattainable without incision, and in such cases cold affusion applied as above has always proved efficacious.

We may here recal attention to an announcement in the last volume of The Lancet (p. 350) recording the cure of a strangulated hernia by the agency of cold produced externally; and another case (p. 731) in which the same disease was remedied by the internal application of cold. The more extensive the strides made by the science of the physician, the less will be the occasion for the knife of the surgeon.

ON THE

TOPICAL APPLICATION OF THE TINCTURE OF IODINE,

WITH NUMEROUS CASES.

By Richard Lanyon, M.D., LL.D., and F.A.S., Lostwithiel.

Experience can alone determine the value of our resources in the practice of our profession; and, making every allowance for prejudice, it is of the first importance, on the one hand, to those who as yet have had but few opportunities of observing for themselves, and on the other it tends to confirm or impugn the observations or conclusions of those who are engaged in the same field of inquiry. Experience, however, is not the natural concomitant of age, for some men pass through life without observation, and consequently without experience. It was well observed by that excellent pathologist, the late Dr. Armstrong, "one feels a certain reverence for grey hairs, and yet I meet in practice with men of advanced years, with intellectual faculties superior to my own, and yet as young as infants with regard to practice." So that long and frequent attendance on the sick does not necessarily produce experience, except there be superadded recollection of, and reflection on, such facts as the clinical observer can alone appreciate. For, as another celebrated writer happily expresses himself, "the only means, let people rest assured, of attaining proficiency in any science which deserves the name of a science, whether the proficiency in question be national or individual, is not by talking but by study—long, deep, patient, laborious, thoughtful study." With these observations I shall take the liberty of introducing to the reader my second paper (see Lancet, vol. ii., 1839-40, page 484) on the local application of the tincture of iodine, not regarding it in the light of "*a universal medicine*," not vaunting it as a general *specific*, but appreciating it, as I hitherto have done, as "by far the most efficient topical application in our possession."

Case 1.—On the 15th of February of last year J. R., a labourer, of middle age, and of temperate habits, felt great pain in the third phalanx of the middle finger of his left hand. He followed his occupation throughout the day, but on the 16th he made application for relief, the whole of the hand being much swollen, accompanied by that boggy feel so characteristic of erysipelas. The temperature of the member is considerably raised, and accompanied by preternatural redness. The hand to receive a thick coating of the tincture of iodine; and, as there is great pain in the wrist, let the application be extended two inches above it.

17. Swelling very much reduced, and the pain has in great measure subsided; indeed, the parts are altogether considerably improved. Apply the tincture, diluted with rectified spirit, and let the arm be supported. My patient was desirous of taking a purgative, but as I was fully persuaded (the bowels being soluble, and no tendency to constitutional irritation) that the iodine would afford unassisted relief, I requested him to observe the result.

18. The skin of the diseased part much corrugated, and the inflammation rapidly on the decline. The tincture, in full strength, as before.

19. Much better, but still complains of a gnawing pain in the part where the disease originated. The integuments about the joint more elevated than parts adjacent. Apply the iodine to the joint only, and let the whole hand be enveloped in a bread-and-water poultice. A saline purgative to be administered.

20. Pain much relieved and tumefaction subsiding. No further treatment was necessary.

Case 2.—February 19th, a man, employed as a tanner, in consequence of the skin of the inner ankle of the right foot being abraded by the pressure of his shoe, has the whole of the anterior part of the foot much swollen. The parts connected with the wound are very considerably enlarged. Pencil the whole of the diseased structure with the tincture, and keep the limb in the horizontal position.

20. Less swollen, and the œdema in great measure removed. Repeat the iodine.

22. Since last night the swelling has been rapidly on the decline. Apply the iodine as before.

24. The limb has nearly regained its natural size. The iodine to be used slightly. After a day or two he returned to his employment.

Case 3.—February 27th, J. W., a labourer, felt considerable pain in the lower and anterior part of the left tibia, two days after which he requested me to examine it. I found the part but slightly swollen, though an aggravation of suffering under pressure, with considerable tenderness, extending two or three inches up the leg. Let the tincture be applied assiduously.

28. The pain is very much diminished, and the trifling elevation which served to mark the situation of the diseased tissues required another application of the iodine to restore them to their normal condition.

Case 4.—February 24th, a young man, being the subject of chilblains, was much distressed by one on the dorsum of the right foot, which, by irritation, had occasioned much swelling of the neighbouring parts, with considerable pain on the least pressure.

The iodine was coated thickly over and beyond the parts complained of.

25. Better. Repeat the tincture.

26. Still improving. Let the iodine be again applied.

27. Swelling and pain much better. Brush the parts over with rectified spirit.

28. The skin corrugated, the tumefaction rapidly subsiding, and the pain and irritation in great measure allayed. The tincture of iodine as before. Convalescent.

Case 5.—April 6th, a man of middle age, and habitually intemperate, received a slight blow by a piece of timber falling against his leg. After some days, having unavailingly had recourse to domestic applications, he applied for assistance, the injured part having by this time degenerated into an ill-conditioned ulcer, with everted edges. There being considerable inflammation, extending to some distance from the ulcer, the tincture was ordered to be applied to the whole of the diseased parts, and rather beyond the boundary line of the inflammation.

7. Considerably better in every respect. The irritation has subsided, and last night was passed comfortably, entirely free from jactitation, which had annoyed him several nights previously. The iodine was again used, and all further treatment suspended. I saw no more of my patient until the 9th, when he again called on me, in consequence of the increase of irritation, and the wound becoming more enlarged, accompanied by a thin secretion from the wound. The tincture was now daily applied, the man following his usual occupation (which was that of a cooper), and the wound gradually cicatrised.

Case 6.—On the night of the 10th of April I arose hastily from bed, being required professionally, and coming in contact with the bedpost, received rather a violent blow on the forefinger of my right hand. In the morning I discovered a slight wound, with inflammation of the surrounding parts. The tincture was applied, and after a few minutes the pain ceased, and the inflammation subsided after a few hours. I washed my hands several times in the course of the day in cold water, and allowed the parts to be unprotected, although the weather was unusually inclement, in consequence of which the pain returned at night, and the wound looked angry. The tincture was reapplied, and there was no occasion for any further treatment.

Case 7.—April 20th, a tradesman consulted me to-day on account of considerable pain and swelling of the thumb of the left hand. The parts readily yielded to pressure, and without pain or œdema. The iodine was applied, and repeated the next day, after which he returned to his employment.

Case 8.—April 23rd, I was requested to examine a young man, who complained of considerable pain in his right knee. By day it gave him no uneasiness, but the pain returned with such intensity after he had retired for the night, that his rest was invariably disturbed for several hours. Pressure did not aggravate his suffering, nor were there any appearances about the part indicative of diseased action. In all other respects his health was good; it appeared, therefore, to be one of those anomalous neuralgic affections for which it is difficult to assign a cause. The tincture was applied unsparingly.

24. After he quitted me yesterday there was increased irritation for some time, which subsiding was followed by a good night's rest. The tincture was reapplied, and for the last time, the functions of the limb being now completely restored.

Case 9.—April 24th. I had long wished to know the effect of iodine on gout, and having at length met with a case where a concurrent opinion determined my diagnosis, I think it worthy of record. A poor man, the father of several apparently healthy children, felt pain, with a slight blush at the root of the great toe of his left foot, which resembled gout to all intents and purposes. The tincture was applied, as before described, on several succeeding days, and the pain and inflammation gradually and permanently disappeared.

Case 10.—May 6th, an old gentleman, a valetudinarian, in consequence of repeated paralytic attacks, was suddenly seized with considerable pain in his left leg. On examination it was swollen and anasarcous, with no pain on pressure, the tumefaction not disappearing after retaining the limb in the horizontal position. On the shin was a patch of cuticle in a state of desquamation, marking the situation where a sluggish ulcer had formerly been. Under these circumstances I thought it prudent to give the whole of the limb, or rather those parts of it below the knee, two or three coats of the *diluted* tincture.

8. The skin is shrivelled, and the malleolus externus, which at my last report was scarcely to be detected by the eye, is now distinctly prominent. The iodine having produced no irritation, the concentrated tincture was now used.

9. The anasarca is gradually disappearing. Tincture to be repeated.

10. Much irritation was produced for an hour or two after yesterday's application, but the limb is no longer anasarcous. Still no permanent advantage was gained in this case; the swelling again returned, which was produced and maintained by causes in connection with want of tone in the system generally, over which it is not to be ex-

pected that local applications can exercise the least influence.

Case 11.—May 13, a girl, sixteen years of age, and generally healthy, applied with a swollen knee, stiffness of the joint, and very acute pain in the anterior and superior part of the tibia, but no pain whatever in the joint itself. Blisters had been applied on either side of the knee, and a mercurial purgative administered, without the least benefit. The tincture was freely used, and so sensible were the parts, that even the application of the camel's-hair pencil produced considerable suffering.

14. Better, and slept soundly last night; is now comparatively free from pain in the supine position. Repeat the iodine. Swelling receding, and the friction of the pencil was not felt so sensibly; indeed moderate pressure with the finger was borne with a much less amount of pain than was produced by the gentle friction of the pencil yesterday.

14. Although the morbid sensibility has very much diminished, the iodine has produced local irritation, which was followed by the most beneficial result. I found her to-day with the knee less stiff, and in every respect improving. The tincture to be repeated, diluted with rectified spirit.

16. Still the iodine causes much pain, but is followed by an alleviation of symptoms, without the cutaneous irritation which this remedy is apt to produce; I have thought it, therefore, advisable to use the concentrated tincture.

17. The last application produced considerable pain for a short time yesterday, but she is so much relieved that she is enabled to walk with very little inconvenience, and recovered without further treatment. I have frequently remarked, and the above is a good illustration of the fact, that in proportion to the amount of *pain* which this application produces, so much the more benefit usually succeeds. I write advisedly, however, for occasional instances are met with where very considerable pain, attended with cutaneous irritation, are the consequences, which add to rather than diminish the sufferings of the patient.

Case 12.—A farmer of this neighbourhood, of middle age, after considerable exertion, felt great pain along the course of the spermatic cord, with pain, hardness, and enlargement of the left testicle. The tincture was applied unsparingly, which was attended with so much irritation that my patient would not allow of its being repeated. The result, however, of this single application was that the disease *gradually* disappeared, and in about a week he was convalescent.

Case 13.—May 20th, a young clergyman had the misfortune, by the falling of his horse, to receive a blow on his left wrist; the result was pain, swelling, and stiffness of the joint, and the back of the hand was œdematous. Before I saw him he had taken a saline purgative, and he was advised without delay to apply twelve leeches, after which it was my intention to have recourse to the tincture of iodine. Having failed of success with the leeches, the parts were at once thickly pencilled with the tincture, which produced a very good night's rest, and the swelling became so far restrained as to allow of the motions of the joint being partially performed, and my patient was convinced that altogether there was considerable improvement. On the third day after the injury the application of the tincture was repeated, and I did not see him again until the seventh day, when he expressed much surprise at the benefit he had received. The swelling had entirely receded, and the functions of the joint were completely restored. Rectified spirit was freely applied by the camel's-hair pencil, and no further treatment was necessary.

Case 14.—June 10th, a delicate young lady, extremely found of gaiety, had her health very much impaired by keeping late hours. Her left leg had been swollen for some time past, and was now become œdematous. The tincture was applied as usual, from the knee, including the foot, which, after a day or two, produced an evident improvement. The treatment was repeated, which caused much irritation, and the production of several bullæ. Absorption, however, steadily proceeded, and the cure was completed by the assiduous application of the spirit lotion.

Case 15.—October 17th, a child, eighteen months old, was brought to me, whom the mother represented as crying violently when evacuating the urine, as if in great agony. On separating the labia pudendi the parts adjacent were found to be much swollen, red, and irritable. A mercurial purgative was prescribed, and the persevering application of the spirit lotion, from which no relief being obtained, the undiluted tincture of iodine was used, without suspending the lotion. This treatment being continued for three days, the little sufferer was restored to health.

Case 16.—Inflammation of the bursæ affords to the medical man no very pleasing recollections in consequence of the difficulty, when effusion has taken place, of discussing the tumours by means at present recommended. Independent of incision, I believe our professors offer us no certain curative treatment, and Mr. Lawrence's recommendation in such cases—appalling but honest—is too much to our present purpose to be disregarded. The learned professor, after inti-

mating that when neglected inflammation is suffered to proceed to effusion, remarks that "we frequently find ourselves unable to relieve the patient without making an opening into the cavities of the bursæ. The sides of those cavities partake, in some measure, of a fibrous texture, so that if the inflammation have been active, and the fluid within the cavity be of a purulent character, escape is not easy, and the inflammatory symptoms run very high. Under these circumstances it is expedient to make a free opening into the bursæ to allow the purulent fluid to be discharged; it is better, indeed, to make the opening of a very considerable size, and, in fact, in some instances, to slit open the bursæ their whole length." The learned lecturer further proceeds to assure us that the bursæ, more particularly over the patella, becomes occasionally so thickened and enlarged as to allow of no relief from antiphlogistic treatment, and requiring that it should be dissected away. Surely, then, any preparation offering the least chance of assistance, where disease is so intractable, and our own resources are frequently confined to extended incisions and the actual removal of parts, should claim our utmost consideration. The preparation I would recommend under these circumstances is iodine, not as a specific, not as an *experimentum crucis*, but as worthy of our regard as staying the knife of the operator, perhaps, on some occasions. I shall give the following case, as exemplifying the importance of the iodine under such circumstances:—October 23rd, a stone-mason, usually healthy, in following his vocation, had occasion to rest a great deal on the knee. He complained, in the first place, of great pain in the neighbourhood of the right patella, but discovered no enlargement until the third day, when he was surprised to find a considerable swelling over the upper part of the knee-joint, having the usual characters of bursal disease. Let the parts be pencilled with the tincture of iodine.

24. Very little or no alteration. The tincture to be repeated.

25. Swelling diminished, and as he complained of the application of yesterday, the rectified spirit is to be substituted.

26. Going on well. The tincture to be used, diluted with rectified spirit. On the succeeding day the spirit was used alone, and on the 27th the tumour was found so much reduced that further treatment was considered unnecessary. Two days after this he went to his employment, but having imprudently used the knee as before he was again on the sick-list, and the tumour was quite as large as at first. The iodine treatment was pursued, as before, with success, and as experience had taught him to be more cautious, the disease was permanently cured.

Case 17.—November 20th, I was consulted by a young man who had an indurated tumour of the size of a marble on his chin. His attention had been directed to the part about a fortnight before by a slight elevation, which gradually extended, and was exceedingly painful. The tincture was applied freely, which produced irritation to such an extent as to make my patient fearful of having it repeated. After about a week I overcame his fears by assuring him that by diluting the tincture irritation would not be so liable to recur, still expressing my confidence in the efficacy of the remedy. Although diluted with an equal part of rectified spirit much uneasiness was produced; but by using daily for about a week one-third of the tincture to two of spirit, which produced but little pain, the chin was made to assume its natural appearance.

Case 18.—November 22nd, an elderly man, a tailor, has a well-defined bursal swelling of the left elbow; he went to bed last night complaining of great pain, and was surprised this morning, and much alarmed, on discovering the sudden enlargement. He was questioned as to the exciting cause, but had no recollection of the joint having been injured. The iodine treatment was pursued for about a week, diluting it according to circumstances, and the tumour gradually receded. It would be easy to multiply examples of the relief obtained in similar instances, but it will be sufficient to remark that medical practitioners residing in mining districts will find the tincture of iodine a valuable application, and frequently succeeding where other measures have failed.

Case 19.—November 23rd, J. S., a man habituated to the frequent use of ardent spirits, was convalescing from inflammation of the lungs, when he drew my attention to a swelling which occupied the whole of the back of the left hand, with considerable œdema. Pressure produced no pain, and the enlargement was altogether of such a character as to denote great reduction of the powers of the constitution. The iodine diluted was freely applied, and it was really surprising to observe the immediate improvement imparted to the diseased tissues. It was repeated the next day, and the swelling was wholly removed.

Case 20.—December 6th, a man, accustomed to ride frequently on horseback, contracted orchitis by being impelled violently against the pummel of his saddle, in consequence of which the right testicle became enlarged, hard, and painful. The dilute tincture was applied, which produced considerable irritation.

7. In every respect better, and another application restored the parts to a normal condition.

CASE 21.—December 20th, a tradesman consulted me in consequence of the whole of the upper part of his left knee being much swollen, inflamed, and painful, for which he could assign no cause. I strongly suspect, however, from his intemperate habits, that it originated in a drunken frolic. He was very lame, and could not walk without the assistance of a stick. The undiluted tincture was applied thickly on this and the following day; the effect of the first application was the removal of the lameness, and on the fourth day it is reported that the disease had wholly disappeared.

CASE 22.—A very intelligent relative, a medical gentleman, residing in the extremity of the county of Cornwall, thus expresses himself in a private letter received some months since:—"Your favourite medicine, iodine, has recently cured a patient of mine, in one application, of that most painful and intractable disease, *vulgo* shingles; it has always been most obstinate in my practice under other treatment."

Mr. Craig, in the twelfth number of the present volume of THE LANCET, recommends flour as an excellent application in erysipelas: without, however, wishing to disparage it, having never used it so as to speak confidently of its value, still my experience leads me to conclude with Mr. Davies, on the treatment of that disease, that it will be found upon trial that the tincture of iodine, as a topical remedy, will be far more efficacious than any of the usual applications, "or all of them put together."* To conclude, then, I offer these cases to the profession, not as solitary instances of success, but merely as exemplifications from clinical poultice, demonstrating those diseases in which this powerful remedy has been most decidedly useful. I asserted in my last paper my belief that the iodine would eventually claim to be the most efficient topical application in our possession, which opinion has gained additional strength by the accumulation of additional evidence. I do not think this agent should be used at the discretion of patients, but that its efficiency may be fully obtained, it should be directed in every instance by the practitioner himself, otherwise it may be the occasion of much inconvenience, and bring disrepute on a remedy which, under proper management, is safe, powerful, and effective.

Lostwithiel, August 1, 1843.

RICORD employs against blennorrhœa, capsules made with copaiba covered with a crust of extract of rhatany, from which, he says, patients find less inconvenience than from the copaiba-capsules in ordinary use.

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* Practical Remarks on the Use of Iodine, locally Applied, p. 28.

EMPLOYMENT OF BLISTERS IN THE DISEASES OF YOUNG CHILDREN.

To the Editor of THE LANCET.

SIR,—I am quite aware that there may be among your numerous readers those, in common with your correspondent of last week (p. 671), holding a different opinion upon the question at issue from that entertained by Mr. Dendy and myself. My own experience on this subject, which extends no further back than 1830, would, perhaps, fail to bring conviction to my mind, had I not to support it that of my late father, which may be considered amply sufficient to test the point under discussion. My father was in the habit of remarking to his pupils that previously to his observance of the said precautions in the employment of blisters in young children, sloughings were not unfrequent events of their application in his practice, and in the same proportional frequency of occurrence, he supposed, as in the practice of others under similar circumstances; but that he could not recall to his mind one case in which that untoward result had occurred as a consequence of their use after his adoption of the rules which he had found it necessary to prescribe, when these rules had been strictly adhered to. To enter more into detail: my father's directions, when prescribing this remedy, applied not simply to the constituency of the cerate, its mode of preparation, the guarding the surface of the blister-plaster by fine tissue-paper, and the duration of its application, but to the method also of applying the dressing. The linen or lint, prepared with the covering of hard cerate, was laid on in narrow strips of about two inches wide, each being made to overlap the one next to it, and the whole was secured by a firmly applied linen band, to prevent displacement of the dressing; thus the entire dressing lay evenly in the different postures of the child, not becoming wrinkled, and thus fretting up the surface, as happens when it forms a single piece. These are minutiæ, together with others, which I might add, not unworthy of our attention when such delicate subjects as infants become our patients.

Having, by my professional instructors, on the one hand, been advised that blisters were dangerous applications to young children, and, on the other, that with certain precautions they were safe, I was prompted, with ample opportunities at my command, to investigate the matter for myself; and the result of my inquiries has been that of the instances of sloughing which I have met with after the application of blisters, not in one did that accident occur where it could not be most distinctly traced to neglect of one or more of the several conditions which should be observed, and which, if carefully

attended to, will yield similar success in the practice of others. It is not unknown to me that in the malignant form of fevers the application of blisters is apt to be followed by sloughing; but the same effect I have observed to take place in the locality of leech-bites in those diseases. These are unfortunate events, over which we have less control; but we might here determine according to our best judgment between the employment of blisters and mustard-poultices, bearing in mind, however, that the latter are much less efficient. Even in these cases, I am persuaded that if strict attention were paid to the rules prescribed, the frequency of sloughing would be greatly diminished; but with regard to the acute and sthenic inflammatory diseases of young children, to which my remarks more especially apply, the event of sloughing, agreeably to my experience, supported by that of my late father, may be prevented. In these observations I have only aimed at the truth, and believing that the same spirit has dictated the remarks of your correspondent, Mr. Burchell, I have the honour to remain, Sir, yours very faithfully,

JOHN H. DAVIS, M.B.,
Physician to the Royal Maternity Charity, &c.

August 7, 1843.

To the Editor of THE LANCET.

SIR,—It is well known by experienced practitioners that the application of blisters to young children without great precaution is a very hazardous thing. Most appalling sloughings have been produced by them, and, too frequently, fatal results. Mr. Burchell has favoured the profession with a paper on the subject in the last number of your Journal (p. 671). This gentleman states that "he has paid a good deal of attention to the subject, and that he has known sloughing take place in consequence of a blister having been applied during but two hours. The paper is an important one, and deserves attention. Dr. Kennedy, in his work on the Management of Children, 1824, says that in young children all blisters ought to be removed immediately on the skin being uniformly reddened. Now, I consider this rule to be a very unsafe one to give to a nurse, and, if strictly adhered to, I fear that it would not, in all cases, prevent sad consequences. Whenever a blister has remained long enough to produce an uniform redness, the skin has received its full effect, and vesication will, in a few hours afterwards, appear over the surface, even in an adult. I have for many years carried my caution on this subject rather further than is stated in the plan laid down by Mr. Burchell. I find that a blister does not produce any visible effect upon the skin of a young child in an hour; nevertheless, sufficient irritation will follow if it be removed at the expiration of that time. In the "London Med. and Surg. Journ." for February, 1829, I, as co-editor, made the following remarks:—"We find that an hour, or an hour and a half, is sufficient time for a blister to remain upon a child, and although, at the expiration of that time, no vesication is apparent, yet, if the part be covered with any mild dressing, or a poultice, a sufficient degree of irritation will be observed in a few hours; in fact, quite sufficient for the peculiarly delicate and susceptible constitution of children." Blisters for children should be spread very thin. If the plaster be good, a very small quantity will produce sufficient effect. If these points are carefully attended to, I believe that sloughing will be a very rare occurrence in those constitutions in which it is proper to employ blisters. I am, Sir, your obedient servant,

J. HOULTON.

London, August 5, 1843.

HOPITAL DE LA CHARITÉ, PARIS.

CLINICAL OBSERVATIONS

BY M. VELPEAU,

ON

REMARKABLE CASES TREATED IN THE HOSPITAL

DURING THE MONTH OF APRIL, 1843.

SERIOUS ACCIDENT, FOLLOWED BY NO GRAVE INJURY.

A FEMALE servant, aged twenty-one, and of good constitution, was brought to the hospital at the latter end of March. In crossing the street she had been run over by a carriage, which had passed across her body; fortunately the vehicle was of a light construction, and not heavily laden at the time. Conveyed immediately to La Charité, the symptom most strikingly manifested was that her respiration was excessively painful, the diaphragm appearing to be inactive. No wound or bruise was perceptible on the exterior of the body, except some injury to the face of no great consequence. The bony frame of the thorax, examined as minutely as the suffering of the patient would admit of, presented no signs of fracture. Pain was referred chiefly to the loins; urine had been passed; no paralytic symptom existed; but the tongue was clogged with mucus, the pulse weak, and the abdomen tumefied.

What were the actual injuries in this case? The most probable were fracture of the ribs or vertebræ, effusion within the abdomen or chest, or both, or rupture of some of the viscera. But there was no paralysis or external sign of spinal fracture, nor were there any decided symptoms that

should lead to the diagnosis of fracture of the ribs. Internal hæmorrhage seemed more probable; for some symptoms, as a feeble pulse, anxiety, swelling of the abdomen, &c., were present, which continually attend such accidents. But, in addition to these, internal hæmorrhage is accompanied with paleness, syncope, and general prostration, which were not present in this case; the patient had, on the contrary, a flushed countenance. Neither would this lesion account for the acute pains which were felt by the patient, and which, indeed, would rather attend a rupture of some viscus. Well, then, was the latter circumstance probable? It is well known that on the abdomen being subjected to any violence such a result might ensue, and without any injury being externally apparent. Military surgeons have recorded many cases in which death has been caused by a projectile striking the body, so as to disorganise the intestines, &c., altogether, while the parietes of the abdomen have been left uninjured. The explanation of such a phenomenon must be sought for in the great elasticity of the tegumentary and other coverings of the abdomen, and the little capability for resistance to external force presented by many of the viscera.

Was this, then, the probable condition of our patient—that a viscus had been ruptured without any visible external sign of injury? The tumefaction of the abdomen had become very great, but it was necessary to ascertain if that were owing to the presence of liquid or of gas. Again, we should pause to inquire whether the rupture of each viscus would not give rise to a special set of symptoms. If the stomach were ruptured we should have the patient vomiting blood, while alimentary matters and air would probably pass into the cavity of the peritoneum; if the same injury had occurred to the large intestine the effused blood would pass per anum, and gas and fæces would escape into the peritoneum, just as in the previous case; if the rupture were in the small intestine an acute and sudden peritonitis would supervene; if in the urinary bladder the patient would be unable to micturate, and peritonitis would then also follow, as it would if the spleen, liver, or kidney, were the organ injured. In the present case, except the swollen state of the abdomen, no symptoms were present capable of supporting an opinion that any viscus had been ruptured, nor did any exist that pointed distinctly to any one organ of the body as the place of the main source of disturbance.

M. Velpeau at first confined himself to ordering a camphorated liniment to the abdomen, and the internal administration of opium, with diaphoretic drinks, &c. Peritonitis supervened, which was combatted successfully with mild antiphlogistic treatment. About the tenth or twelfth day the patient was convalescent, and on April 24th she left the hospital.

FALL FROM A SECOND FLOOR. TREATMENT AND RECOVERY. PECULIAR SEQUEL OF INJURY.

On the 27th of March a mason was brought in who had fallen from a staircase at the level of a second floor, to the ground. He had received by his fall a wound in his right hypochondriac region, where also a swelling, of the size of a fœtal head, had arisen, evidently originating from an internal effusion of blood. On the forehead was a cut, extending through integument and muscle, so that the bone appeared at the bottom of the wound. The eyelids, especially the left, were much swollen and infiltrated, and this symptom gave reason for a doubt whether some portion of the base of the cranium had not been fractured, a suspicion to which some colour was given by the nervous disturbance present. The face was pale and the pulse feeble.

In cases like these, observed M. Velpeau, you must adapt your treatment to two well-marked periods,—the first, one of prostration; the second, one of reaction. In the first stimulants are applicable,—sinapisms, infusion of arnica, ether, &c.; water-dressing to be applied to the wounds. Next day (but not generally before) leeches and bleeding must be employed to subdue the local and general inflammation.

In this case such treatment was accordingly adopted. The base of the cranium did not appear, however, to have sustained injury; the wound in the forehead cicatrised; no visceral rupture of consequence seemed to have occurred, for the abdominal tumour became absorbed, and the patient left the hospital cured on April 20th. But at the time of his discharge a peculiar circumstance was noticeable in him, consequent on his accident. A portion of surface in the hypochondriac region which had been the seat of injury, had altogether lost its sensibility. Pinching, pricking, &c., caused no pain there; yet there was no reason for supposing that the adjacent part of the spinal cord was morbid, since sensation was perfect in the interval between the surface affected and the spine. M. Velpeau has reported in the "Archives Generale," &c., an analogous instance of this unusual occurrence. The subject in the latter case was a woman in whose side an extent of surface, as large as a halfpenny, existed, entirely destitute of sensation.

CANCERS OF THE TONGUE AND EYE.

Two cases of cancer must be noticed, one of the tongue, the other of the eye. The former, in a woman, a native of a rural district, had resisted various kinds of treatment

in the hospital. The tongue was covered on one side with a number of ulcerations, on a hard base, some upwards of half an inch in diameter, others smaller; and towards the back of the organ was a hardened mass, as large as a walnut. The ulcerations had something like a syphilitic appearance, but there seemed no reason to believe that they really had a venereal origin. Proto-ioduret of mercury, in small doses, had been given, the sores had been cauterised afterwards with nitric acid and mercury, and a gargle of alum had been prescribed, under which treatment some—though but transient—benefit had accrued.

On this case M. Velpeau remarked, that cancer of the tongue was, above all other cancers, the most likely to be renewed after operation. This was not, however, an invariable rule; and he cited the case of a tradesman's wife in Paris, on whom he had operated six years previously, for a cancer on the tongue, and who had since had no return of the disease. It was a current belief that patients so operated upon permanently lost the power of articulation subsequently. This had been combatted by several authorities. An old French surgeon, of Saumur, had published a memoir on an individual who had recovered his use of speech after the almost complete loss of his tongue; Bernard de Jussieu had given us the history of a patient whose tongue had been wholly destroyed by small-pox, and yet whose power of utterance was regained at the end of a few months; and Ambrose Paré recounts the case of a husbandman who, having lost his tongue, and been accordingly dumb for a long period, found his speech all on a sudden, while drinking from a wooden porringer and being the subject of a practical joke played by one of his fellow-labourers. In this case, the foreign body, standing in the place of the tongue, perhaps allowed him to utter a few articulate sounds, and some surgeons have hence tried to substitute an artificial organ when the tongue has been removed, though hitherto with little success. Such histories as the above must, however, be taken with some limitation; though it is certain that the tongue, after mutilation, accommodates itself to its new circumstances, recovering in part its original form, and speech is thereby after a time recovered.

Two methods are in use for operating on cancer of the tongue: by ligature and excision. For applying the ligature a curved needle, carrying a double thread, is employed, and passed through the tongue from below upwards, behind the degenerescence, and in a healthy portion of tissue. The thread is there fixed by means of a knot; and a similar process is performed in the anterior part of the organ, the part between the ligatures being suffered to undergo mortification. M. Velpeau prefers this process when the cancer involves the back part of the tongue, which is with difficulty cauterised, and where the hæmorrhage is liable to be great; in other situations he resorts to extirpation of the cancer by the knife. In the patient in question, half of the tongue had to be removed. The tongue was drawn forwards by means of a tape passed through its apex and held by an assistant; another assistant kept the mouth duly open, and the surgeon, with a bistoury, cut the tongue, behind the diseased portion, from without inwards, as far as the middle line, in a vertical direction. The bistoury was then removed, and a second incision made from above downwards, along the dorsum of the tongue, completely through the organ, the two incisions meeting at a right angle. Extensive hæmorrhage ensued, which was checked by the application of the actual cautery to the wound, the head of the patient being leaned forward the while. The patient, for a few days, appeared to be going on well; but fever and ganglionic swelling then set it; the cancerous tendency manifested itself elsewhere; emaciation proceeded most rapidly; sallowness, prostration, &c., were successively observed, and death speedily ensued.

The cancer of the eye, respecting which few particulars are given, was operated upon on the 21st of April. The diseased structure was very superficial; the deeply-seated contents of the orbit were supposed to be unaffected. The case, after operation, was, like that before mentioned, going on well, when the man drank, in one night, more than a bottle of wine, which he had found means to procure, and which became the probable exciting cause of his death on the 2nd of May.

TREATMENT OF STRUMOUS PERITONITIS.

Sir Henry Marsh remarks,—"The copious detractions of blood which are essentially necessary in ordinary peritonitis, are rarely admissable in the strumous form; from the constitution of the patient, and the chronic nature of the malady, it will be seldom found necessary to employ any but topical bleedings; and, when this is effected by the application of leeches, care must be taken to guard against the too long-continued and profuse oozing of blood which, in strumous individuals, is apt to arise from the bites of leeches.... In some cases I have directed mercury and iodine to be rubbed in conjointly, by adding three grains of the proto-ioduret of mercury to a scruple or half a drachm of axunge; and I have thought that the inunction of this compound has produced more rapid and salutary effects upon the disease than the pure mercurial ointment; I can, moreover, assert that in some few cases in which the mercurial ointment alone has failed this combination has been effective."—*Dublin Journ. of Med. Science.*

WESTMINSTER HOSPITAL.

INFLAMED BURSA OVER THE PATELLA. EXTIRPATION. CURE.

In some clinical remarks, a day or two since, Mr. Hale Thomson alluded to the case of a woman named Charlotte Buchanan, aged 27, a housemaid, who was admitted into the hospital on the 27th of May last with inflamed bursa of the patella of the right knee. She had suffered from the affection for six months, during four of which counter-irritants had been applied without effect, and pressure was subsequently applied for a month with no perceptible benefit. As these means had failed, and for reasons which are explained in the course of the remarks, he determined on cutting out the tumour, which he accordingly did, and the woman is now quite well, and ordered to be discharged.

Mr. Thomson, in commenting on the case, observed that bursæ became inflamed in various parts of the body, but in no situation was this occurrence so frequent as over the patella. Four distinct modes of treatment had been recommended and employed by surgeons for their relief. The first consisted of the application of blisters, or other counter-irritants, followed by pressure; the second was the passage of a seton through the tumour; the third was the plan pursued by Drs. Houston and Williams, and consisted in the formation of a valvular opening into the bursa, letting out the fluid, and incising the inner surface of the cavity; the fourth plan was that which he had adopted in the present instance, namely, extirpation with the knife. With respect to the first plan, it was often successful, and was the only one which could be safely employed where inflammation existed in any of the neighbouring structures. The best counter-irritant he had used was the tincture of iodine. He was fearful of using the seton, although cases of its successful employment had been recorded, because the inflammation which was necessary to be established before a cure could be effected was apt to become incontrollable and endanger the joint. He had seen cases in which it had been necessary to amputate a limb in consequence of the extension of inflammation from an inflamed bursa. In cases where the tumour was immoveable and the joint unaffected, the plan of Dr. Houston might be occasionally followed with advantage, but he was more inclined to adopt this proceeding in those cases of enlarged bursæ of the wrist-joint, which a sharp blow with a book failed to break. In these cases he invariably introduced a needle into the swelling, let out the fluid, and applied pressure. He had been induced to use the knife in Buchanan's case from the circumstance of the tumour being moveable, perfectly circumscribed, quite unconnected with the joint, and from the great thickness of the tunics of the bursa and the consequently very small quantity of fluid which it contained. Any other plan of treatment would have probably been of little avail. The students would have observed that he made a straight longitudinal incision down to the tumour, which he carefully dissected from its attachments, and that the proceeding was by no means a difficult one. The coats of the bursæ were at least a quarter of an inch in thickness. It should be the object of the surgeon, in operations of this kind, to save as much of the skin as possible, for although immediately after the operation there would be a large cavity over the patella, and much loose integument, it would be found that by the time the wound had healed, the skin would not form too extensive a covering. Had he, in this case, removed two small elliptical portions of skin on each side of the tumour, much inconvenience would have been experienced by the patient from the tightness of the skin over the knee. No bad consequences whatever had followed the operation in this case, neither did he believe that it would in any other if the proper after-treatment were pursued, a treatment which, it should be remembered, must be similar to that for diseased joint, complete quietude, and the payment of strict attention to the general health.

EFFECT OF MENSTRUATION ON LACTATION.

According to Dr. Raciborski, in a paper to the French Academy of Medicine, menstruation exerts no perceptible influence on the number or size of the globules in milk, and the milk continues to have an alkaline reaction throughout the whole period of menstruation. The only modification undergone by the milk during this period is a diminution in the quantity of cream it contains, to which circumstance its blue tinge at the same time is ascribable. This modification neither appears to exert any influence disturbing the health of nurses, or to deteriorate the nourishment of the infants they may suckle; and in M. Raciborski's opinion, the act of menstruation does not render a wet nurse less eligible for her function."—*L'Experience.*

INCONTINENCE OF URINE.—For feeble and delicate patients M. Chabrely advises tar-water as an ordinary drink; and to persons of more bodily vigour an infusion of camomile with syrup of Tolu, and pills of this balsam or that of Peru, pitch, styrax, or copaiba, with opium. Lavements of some of these substances are used, with a woollen bandage, so as to apply over the loins Tolu balsam in a concrete state; and frictions of the hypogastric and lumbar regions with an emulsion of turpentine spirit, white of egg, and gum arabic. Similar methods have been tried by M. Chabrely with advantage in whites, prolapsus uteri, &c.—*L'Experience.*

LONDON HOSPITAL.

GENERAL EMPHYSEMA FROM FRACTURED RIBS.

John Grace, drayman, aged 32, robust, but of irregular and intemperate habits, admitted into the London Hospital under Mr. Scott on the evening of August 8th. Four or five of the ribs on the right side were broken. The cellular tissue over the whole of the body was infiltrated with air, but particularly on the right side of the thorax and neck. The eyelids were so distended as not to allow of their being opened by the natural efforts. There existed a wound at the upper part of the base of the left orbit, injuring the supra-orbitar artery, and giving free exit to air from the surrounding tissue. Oppression of breathing was very great; but it was diminished in the sitting posture.

He met with the accident by a dray, heavily laden, passing obliquely across the chest.

Being in a state of partial collapse, brandy and ammonia were exhibited; and several punctures were made into the tissue over the thorax, which diminished the turgidity of these parts.

10. At each expiration crepitus very distinct, as though the opposed surfaces of the fractured ribs impinged on each other with considerable violence; pulse rapid, small, and hard; dyspnœa urgent; complains of a sense of suffocation, and great difficulty of expectoration. A flannel bandage was applied loosely over the thorax, and he was ordered an ounce of gin every six hours; and sesquicarbonate of ammonia, five grains, camphor mixture, an ounce. Mix for a draught, to be taken every four hours.

11. Passed a restless night; emphysema greater, the general outline of the features being so materially obscured as to render his recognition difficult. Breathing more laboured and stertorous; pulse 120, small and hard. Continues the medicine. During the evening and night the symptoms became aggravated; delirium (chiefly evident in the employment of incoherent language) supervened, and he expired at six o'clock on the morning of the 12th.

Inspection.—Fracture of the ribs from the fourth to the seventh inclusive. A considerable interval existed between the two portions of the seventh, the lower part having projected into the chest and caused extensive laceration of the lung, which was in a state of almost entire collapse. On this side of the thorax there was a pint and a half of bloody fluid. Anterior mediastinum displaced, being pushed towards the left side. Left lung studded with tubercles throughout its extent.

Liver enormously enlarged, of a structure less dense than ordinary. Arachnoid membrane opake; between it and the pia mater a large quantity of serum effused.

EMPHYSEMA FROM A WOUND IN THE NECK.

Catherine M'Kay, aged 50, admitted under Mr. Scott April 28. While separating her daughters, who were quarrelling, she was accidentally struck by a knife thrown from the one to the other, which inflicted a penetrating wound on the left side of the neck, about two inches above the clavicle, and one inch and a half from the median line. This was immediately followed by extensive emphysema, the air rapidly traversing the cellular membrane of the chest, neck, head, and face; and the respiratory murmur could not be heard in the left lung. Pulse scarcely perceptible; skin cold; complains of only slight pain. Cough at intervals, with bloody expectoration. The wound had been dressed before her admission.

She was ordered to be kept perfectly quiet, and warmth to be applied to the surface of the body. At ten in the evening, breathing more laborious; great pain along the right side of the chest; cough more frequent and troublesome, with mucous expectoration, tinged with fluid blood, of a florid red colour. Emphysema diminished on the face, but somewhat increased over the chest. On coughing or making any exertion air rushes through the wound, from beneath the dressings. Skin hot and dry; pulse 100, small and hard, which became, however, fuller and softer, and fell to 80 in a quarter of an hour, on the abstraction of twelve ounces of blood. Ordered, protochloride of mercury, three grains; compound powder of ipecacuanha, eight grains. Mix for a powder, to be taken immediately. Castor-oil, an ounce, to be taken next morning.

29. Emphysema much diminished; respiration less embarrassed; bowels open; skin hot; pulse quick. Protochloride of mercury three grains, every eight hours.

On May 1st the emphysema had much subsided; the respiratory murmur was clearly audible, the wound was healing rapidly, and air no longer passed through it. To continue the calomel night and morning. From this time the case progressed favourably, and the patient was discharged cured on May 11th.

INCARCERATED HERNIA. (CASE 1.)

Thomas Redpath, stoker, ætat. 49, admitted under Mr. Scott on the evening of March 2nd, complaining of pain in a large oscheocele on the left side. States that the hernia first appeared about three years ago, and continued reducible until about nine months prior to admission; that he suffered no inconvenience from it until March 1st, when he found it had increased in size, and on the following morning had become very painful. Several attempts were ineffectually made by his medical attendant to reduce it to its former size.

The tumour was large, hard, and incompressible, inflamed on the surface, and tender to the touch. It communicated with the abdomen by a very large neck, to which the pain was chiefly referred. A hydrocele was distinctly felt at the bottom of it.

The taxis having been applied without avail, both in and out of the hot bath, two ounces of house medicine were administered. Shortly after, a pipe being passed up the rectum, warm water was injected, and immediately pumped out, by which means a quantity of flatus was expelled. A freezing mixture was applied to the hernia, and on its removal twelve leeches were directed to the principal seat of pain. Under this treatment the tumour somewhat diminished. On the following day the bowels acted freely after taking a dose of castor-oil, but the tumour was not perceptibly less. The subsequent course that was adopted consisted in the exhibition of drastic purgatives at appropriate intervals, and the application of leeches, together with evaporating lotion, until all symptoms of inflammation had subsided.

On the 14th of April the hernia was not larger than it was previous to its recent descent, having become gradually but imperceptibly reduced in its dimensions. The patient was ordered an elastic bandage, and left the hospital on the 28th.

INCARCERATED HERNIA. (CASE 2.) OPERATION.

Thomas Turner, labourer, ætat. 53, admitted February 24, 1843, under Mr. Scott, with a large hernia of the left side. It was of the size and form of a small Spanish melon. From the distention of the integument of the scrotum and penis, the latter was entirely hidden from view, a slight pucker only indicating its original position. States that he had been subject to rupture for several years, and that the tumour could not be returned into the abdomen, but that he wore a truss to prevent further protrusion.

His bowels had been constipated for five or six days prior to admission, and he had vomited at intervals for two or three. These symptoms were still present, accompanied with tenderness of the abdomen, tension of the tumour, quick, wiry pulse, a tongue clean on the edges, but furred on either side of the median line, and a state of general exhaustion. An attempt was made at reduction, and so much of the gut returned into the abdomen as to render evident about half an inch of the penis. It soon, however, relapsed. Colocynth and calomel were now exhibited, and ice was locally applied without benefit. The symptoms becoming aggravated, the sac was opened into, and a slight incision made of the upper border of the outer ring, and the transversalis and inner oblique muscles. Partial reduction was with difficulty effected. The gut appeared much engorged. He gave but little expression of pain during the operation, was once violently sick, and immediately after removed to bed in a state of partial collapse, from which he did not rally, notwithstanding the exhibition of diffusive stimuli, &c.

Inspection.—On laying open the sac, which was very large and dense in structure, it was found to contain about a yard and a half of unadherent jejunum (with a portion of the cœcum), enlarged beyond their normal dimensions, and extremely engorged with dark blood on either surface, internally rendering very prominent the mucous villi, and the oblong patches of Peyer's glands. It contained a large quantity of fluid of the colour of pea-soup, and between its folds externally were deposited patches of recent fibrin. The abdominal cavity indicated the first stage of peritonitis. The inner ring was found so approximated to the outer as to destroy their individual distinctions, and measured at the least five inches in circumference.

FEMORAL HERNIA. OPERATION.

Thomas Ryan, tailor, ætat. 48, admitted March 10th, at three, p.m., with a strangulated femoral hernia of the right side, accompanied with constipation, uninterrupted nausea, and hiccough. States that he has been the subject of hernia for the last five years, which, to within a short period of his admission, he has reduced easily and unassisted.

Shortly after admission, attempts at reduction having failed, and the warm bath having been used without effect, the operation was performed, and the protrusion returned into the abdomen without the sac having been opened. Several supernumerary layers of fascia existed between the fascia lata and the fascia transversalis. The bowels acted freely and spontaneously immediately after the operation. Two doses of castor-oil were, however, exhibited during the night.

On the following evening incipient peritonitis supervened, but was checked by leeches. The bowels had not again acted. Sulphate of magnesia, two drachms, every second hour.

12. Had a free evacuation in the afternoon; the pain in the abdomen, however, had returned, but again subsided on the leeches being repeated.

In four days the purgative medicine was dispensed with, the bowels being regular, the skin moist, and the pulse soft. From this period the patient progressed favourably, and left the hospital on April 20th.

THE practitioner should never lose sight of the frequency, in gleet, of organic change in the urethra, and the consequent necessity of exploring it with the utmost care and attention, as any little hardness or modification of the natural state may be quite sufficient to explain the persistency of the running.—*Ricord.*

DREADNOUGHT HOSPITAL-SHIP, RIVER THAMES.

PARALYSIS FROM LESION OF THE CEREBRAL PORTION OF THE NERVOUS SYSTEM.

The following case appears to have been an affection simply of the *cerebral* portion of the nervous system, as opposed to the spinal and ganglionic. The symptoms supporting this view were—1. Hemiplegia of the right side, being the side opposite the one injured. 2. Coma (in this case only partial). 3. Loss of power in the vocal organs. All these might have existed in conjunction with others distinctly referrible to the spinal or ganglionic system; but it is the total absence of spasm or paralysis attacking the functions of ingestion or excretion, or the whole muscular system below a certain point, the presence of all or any of which would have shown it to be a case of combined cerebral or spinal affection. Again, the powers of nutrition remaining unaltered prove that the ganglionic system was unharmed. This case affords another proof of the correctness of Dr. M. Hall's observation, that although the symptoms may be very grave, the prognosis is more favourable when there is lesion of only one of the subdivisions of the nervous system.

David Philips, aged sixteen, proportioned according to his age, fair complexion, low forehead, was brought alongside on the 3rd August, 1842. He was playing with another boy, not heeding the master, who ran after him, in avoiding whom he struck his head violently against the tiller of the vessel. This happened on the 1st of Aug. He was knocked down by the blow, that inflicted a small wound on the vertex, from which about a tablespoonful of blood flowed. He was motionless after the blow, nor did he speak beyond "Yes" and "No," once or twice. He was not quite so stupid during the first twelve hours as he afterwards became, or as he was at the time of his admission. At that time he was perfectly insensible, and lay quiet and motionless, but could be partially roused. He swallowed without difficulty; the stomach, however, rejected all he took.

5. He continued in the same state of complete insensibility, and had not spoken. He lay quietly on his back when undisturbed. Respiration natural; eyes closed, pupils large, contracting partially on the admission of light. The vomiting continued. Sensibility appeared equally present on either side; but he never moved the right arm or leg. He appeared to understand when loudly spoken to. When supported upright he drank whatever was offered to him on being desired to do so. Pulse, when recumbent, 50, when sitting 60, small and soft. The hair was cut close and the head kept cool with wet rags.

6. Has not spoken, but looks more lively and opens his eyes. No movement of the right arm or leg; but he evidently feels when any part is pinched or pricked. Pupils natural, and obedient to light. Vomiting of everything continues. Pulse 48—60, very small and weak; skin cool; no motion; urine passed in bed; enema administered.

7. Still does not speak, but appears more sensible. When directed to put out his tongue he opens his mouth and attempts to do so, but has not the power. He vomits everything he takes, and sometimes, without taking anything, brings up green bilious matter. The right arm and leg are never moved spontaneously, but, upon irritation of the sole of the foot, some movements are excited in the leg; but these movements probably arise from reflex action. No movement is induced in the arm by any mode of irritation. Vision is probably absent in the right eye. There is no heat of head nor injection of the eyes; pupils are natural in both eyes, and move actively on admission of light; urine is passed in bed; bowels not open, notwithstanding the administration of two enemata, neither of which came away; tongue moist and very clean; pulse 48 recumbent, 64 sitting.

8. He remains in much the same state, but is more easily roused; he evidently understands much of what is said to him, but does not yet speak. His master visited him to-day. The boy evidently recognised him, and when spoken to, made an inarticulate effort to answer. He often made this noise. The eyes are more open, and he now seems to take notice of persons moving about him. The pupils are natural, but he certainly has no power of vision in the right eye. He has had six motions since yesterday, which, as well as the urine, have been passed in bed. He has had no vomiting since last night, and helped himself to his own breakfast. Pulse 48—64. He was placed on a water-bed.

9. He remains much in the same state; does not speak; tongue is moist and clean; he yawns frequently (and this he continued to do) and scratches his nose and face; but he has no use of the arm. Lies principally on the right side. The integuments on the knee and hip are reddened; the skin is warmer than it has hitherto been. He moves his left hand when ordered to do so, but cannot use the right, nor can he form any articulate sound. The mouth is slightly drawn to the left. On the right hand are some subcutaneous collections of pus. The urine is passed in bed, with a strong ammoniacal odour. Pulse 54—70. Arrow-root given him.

10. Ate his breakfast voraciously. He would at any time eat dry bread voraciously. Pulse 54—80.

11. Pulse 60—90. Twelve leeches applied to the temples.

12. He appeared rather more stupid this morning. The bowels have been opened three times since yesterday; no vomiting; pulse 54—60.

13. Has gained considerable power of motion in the right leg, but cannot move the arm; has no headach; pulse 72—84, soft and natural.

14. Has a peculiar stare, almost amounting to strabismus; urine high-coloured, cloudy, not ammoniacal; appetite ravenous. Ordinary diet allowed.

17. Is now able to walk.

18. Walks equally well with both legs; has articulated "No."

19. Considerable power of movement in the right arm; gets out of bed to make water.

20. He can say "Yes" and "No;" moves the right arm freely.

22. Walks now with but slight hesitation. He is perfectly rational, but has a peculiar look. Says that the right arm and leg are much weaker than the opposite limbs. Has neither headach nor giddiness; the vision appears unimpaired.

29. Discharged at his own request, cured; the only remains of cerebral affection being weakness in the right arm, a slight squint, and slowness of speech.

PARAPLEGIA.

Thomas Murphy, aged 22, a labourer from Cork, five feet ten inches in height, was brought alongside on the 20th Sept., 1842, and hoisted up the main hatchway from the porthole (for all who cannot walk up the accommodation-ladder are hoisted up in a tray). He was insensible. He had been struck by the jib-boom of a vessel in the small of the back, while leaning over the gunwale of a boat with his feet on the ceiling and his hands holding on the ship's side. The jib-boom was being lowered at the time. Unable to speak; pain apparently in the region of the diaphragm, with some embarrassment in respiration; priapism; unable to move the lower extremities in the least; surface cold; pulse 72, soft; some blood about the nose. In the evening the face became flushed, the pulse 100, full; catheter passed; no reflex movement upon irritation of the lower extremities; sensibility was extinguished in both legs below the junction of the lower and middle third of the thighs, above it is perfect; no disturbance of the intellect. Ten ounces of blood were abstracted.

21. Paraplegia continues complete, and he has no sensibility below the umbilicus; the priapism had ceased, but returned after the introduction of the catheter; no reflex motion whatever by any mode of irritation except strong heat, which produces a little motion in the toes; passed a copious motion in bed. Early in the morning he vomited about a pint of brown-looking fluid, thick and yeasty. Complains of pain only in the region of the diaphragm, with tenderness on pressure under the ribs, on both sides equally; swallows without difficulty; vomited with heaving, and heaved several times before vomiting. When directed to inspire deeply, raises the ribs and sternum, but the abdomen is retracted instead of being expanded, which was not the case soon after his admission. When undisturbed he lies on the back with the eyes closed, moaning, or rather groaning, frequently. Respiration apparently difficult, forty in a minute; pulse 108; skin hot and moist; tongue dry, brown in centre. There followed frequent ineffectual cough. The chest was examined anteriorly, but nothing abnormal was elicited beyond greater resonance (tympanitic) on the left side, as also absence of respiratory murmur.

22. Apparently much better; pulse 96; respiration 36, much less embarrassed; he speaks with greater ease; swallows fluids without difficulty, cannot manage solids; very slight movements produced by pricking the soles of the feet; the line of sensibility probably an inch higher to-day; immediately above this line is another, in which the sensibility of the integuments appears to be exalted; still complains of pain in the hypochondria; copious lithic cloud.

23. Improving; pulse 84; respiration 40, performed chiefly on the right side, which is more expanded than the other; no motion or sensation below a line midway between the ensiform cartilage and umbilicus.

26. Improving; pulse 90; respiration 32, regular and natural; diaphragm acts; cough less; mucous râle less.

29. Insensibility as high as the hypochondria; priapism; urine high-coloured, clear, and acid.

Oct. 1. Quite well in health; urine natural.

10. Has been feverish for several days; urine now ammoniacal, after being passed incontinently, and is loaded with mucoid pus; priapism ceased.

June 23, 1843. Is lying on a water-bed; his face full and florid, flesh firm, altogether healthy in appearance, very different from what he was; his appetite is good; his diet all along has been a baked chop, half a pound of potatoes, one pound of bread, and two pints of milk. For the last two months he had had four ounces of wine. At first he had porter. Erysipelas came on after the porter was left off, about a month before Christmas. He then had wine given him; this was followed immediately by another attack. About three months ago he had a third. Each attack lasted from a week to a fortnight. The local disease appeared first a little under

Poupart's ligament. The limbs were kept wet with lead lotion; one leg was rolled as far as the knee. Sensation is now absent on the right side, below the umbilicus, with the exception of the tips of the toes; on the left sensation is in a great measure restored; he is incapable of moving either leg; passes his motions and urine involuntarily. He has had sores on the sacrum and on the hips, which are now healing up or healed. Has lain on a water-bed nearly all the time. He has a considerable impediment in his speech; but this has been the case from infancy.

July 25. In much the same state.

In all cases of partial paralysis the surgeon has detected a line of increased nervous sensibility to touch, at about an inch in extent round the limb, body, or half-body, exactly where the nerves terminate whose origin is above the portion of cord diseased. This, of course, is owing to inflammation set up in the neighbourhood of the cord diseased.

RUPTURE OF THE DIAPHRAGM.

W. Garbutt, aged nineteen, Sept. 1, 1842, fell from the rigging, fracturing the left humerus in the lower third, the fracture not communicating with the elbow. The limb was much swollen. The arm was rolled immediately, and put up in pasteboard splints. Before limbs swell, or whilst they are swollen, on board the *Dreadnought*, they are bandaged and put up in splints with the best possible results.

2. Complained of pain in the abdomen, not confined to any one region, rather more severe on the left than the right; vomited frequently, has done so ever since the accident; the matter vomited was greenish, or else merely what he had swallowed; the tongue has a little brownish fur upon it, moist; abdominal muscles rather retracted, the recti can be excited fully without pain; slight ecchymosed swelling opposite the right external abdominal ring; no fracture of the os pubis can be detected; the pain extends round to the back and down the thighs, the left particularly; numbness; no loss of power in the legs; urine made freely, without blood; no motion since he fell; countenance rather anxious, pale; skin cool; pulse 96.

3. Much the same; countenance rather more anxious; skin cool; pulse 108, soft; no abdominal pain or tenderness; abdominal muscles retracted; fluid is rejected before it can have reached the stomach; matter vomited copper-coloured; urine scanty, turbid from deposition of lithates, with a purple sediment; tongue clean, moist; pain chiefly in the lower part of the back.

4. The vomiting ceased yesterday afternoon; he had a good night's rest; the vomiting recurred in the morning, with feeling of weakness and soreness, but not absolute pain, about the epigastrium; a little blood was coughed up from the lungs.

5. Pulse 120; the vomiting continued day and night; he brought up his tea, mixed with brownish mucus, probably altered blood, otherwise fluid with brownish flocculent sediment, consisting in part of sarcinula ventriculi (Goodsir) and partly of mucus and altered blood-globules; but the brown colour appears to be owing chiefly to the sarcinula. Matter vomited feels hot; it exhibits acid reaction with litmus; it had no particular taste; enormous quantity brought up, which became covered with a yeasty froth, very tenacious and viscid. Opium was administered, externally and internally, every day, so that a constant action of the remedium regium (according to Sydenham) was maintained. The day before he died he took every four hours, in doses of one ounce, a mixture composed of fifteen minims of creosote, the white of an egg, two drachms of sugar, four minims of oil of cinnamon, and eight ounces of water. He was delirious during his last hours on the 6th.

Sectio Cadaveris.

The left pleural cavity was occupied by a large distended viscus, which, upon closer examination, proved to be the stomach. This was in an inverted position, the great curvature pointing upwards towards the clavicle, the posterior portion being in contact with the anterior parietes of the chest. In front of this was a considerable portion of the great omentum falling down upon it to a certain extent, covering a knuckle of the large intestine, which was found to be a part of the transverse arch of the colon, about six inches in length. These had been forced through an opening in the diaphragm sufficiently large to admit the whole hand in a closed state. The rent was principally confined to the tendinous portion, although it had enclosed a very small part of the muscular. The heart was considerably displaced, having been thrown on the right side. Not the slightest trace of air could be found in the left lung, which was much diminished in size, and compressed towards the spinal column. In the stomach were seen about two pints of very dark-coloured thickish fluid, similar to what he had vomited before death. The mucous membrane was congested in several parts, but firm and healthy; towards the splenic portion it was raised in a few places, presenting the appearance of an emphysematous lung. In consequence of the large opening in the diaphragm, the displaced viscera did not appear to have been strangulated in the slightest degree. The intestines generally were healthy. Considerable extravasion of blood was observed in the substance of the abdominal muscles.

The diaphragm has been put in spirit. Another instance of perforation of the diaphragm was afforded by an accident of the same nature which took place about the same time.

EJECTION OF A FARTHING FROM THE THROAT.

To the Editor of THE LANCET.

SIR,—on the 15th of May last, a child, two years old, was brought to me by its mother. A farthing being missed which had been given the child to play with, it was feared that the little one had put it in its mouth, and that it had been swallowed. I carefully examined the child's mouth, and passed my fingers and thumb down on each side of the neck; nothing unusual was perceptible; the child was free from any symptom of dyspnœa, and as playful as ever. Not observing anything to lead me to the opinion whether the child had swallowed the farthing or not, I desired the mother to give it a little castor oil and to make herself easy upon the matter. The next day I called and found the child quite well; there was not any untoward indication existing; the bowels had acted healthily, and the appetite was good.

On the 28th of July, forty-four days after the above occurrence, the father called upon me to state that a farthing had, by violent exertions, been ejected from the throat of the child. I made careful inquires respecting the circumstances of the case, of which the following is a perfectly correct statement:—

For a few days after the first alarm the child was in good health, and nothing occurred to induce an anxiety respecting it. But about ten days after, a slight difficulty was perceptible in its efforts of deglutition. This was not, however, continuous, but came on occassionally, swallowing at other times being healthily performed. After a little time these attacks of difficult deglutition increased in frequency and violence; and the father stated it appeared as though something had tilted up and down in the gullet, which at one time lay out of the way and at another time fell across the passage, in valve-like fashion. At length the child could not swallow any solid food, and but a small quantity of fluid food at a time. The patient now wasted away considerably; the paroxysms of suffocation in attempting deglutition became most distressing; and the parents had recourse to a druggist's shop for powders, which did not in the least benefit the child. However, their anxiety was so roused that they took the child into their own bed, in order to watch it during the night, to prevent its suffocation for want of assistance. During this night a severe paroxysm came on, the child struggled violently against its sense of suffocation; a rapid and violent cough attacked it; and the farthing was thrown out of its mouth. This was the early part of the morning of the forty-fourth day after it had passed into the child's throat.

I enclose the farthing to you; the parents have pierced it, in order to preserve it, certainly not as a lucky farthing. I am, Sir, yours obediently,

THOMAS EMBLING.

Brompton-row, Aug. 8, 1843.

N.B. The farthing has been partially cleansed from the oxidised state in which it was thrown from the œsophagus, by the parents of the child.

SWALLOWING A FIVE-FRANC PIECE.

ITS EXTRACTION FROM THE ŒSOPHAGUS.

AT the end of 1838, a farmer in France consulted a medical practitioner for the consequences of his folly in swallowing for a wager, a five-franc piece, a coin about the size of an English crown. (We had thought that such absurd bets were confined to John Bull, but the French journals have lately recorded several instances showing that our neighbours are not disposed to be far behind us. See ante p. 587.) The man in question had suffered for eight days from the presence of the coin in the œsophagus; he could swallow only milk, broth, and other liquids, and was on the high road to perish of hunger.* Pale and half dead with fright, he now applied to M. Monin, who reports the case. That gentleman, on passing an India-rubber sound into the œsophagus, ascertained that the coin was impacted there at about the junction of the upper two-thirds with the lower third of the tube; and he suspected, from being unable to pass his instrument beyond it, and from other signs, that the body was placed horizontally, so as nearly, if not wholly, to block up the passage. The membrane of the œsophagus was so closely contracted around the coin, that the elastic sounds of caoutchouc, whalebone, &c., at first used, had not force enough to compel the latter body to assume a more favourable position. In these embarrassing circumstances M. Monin caused some forceps to be made, the limbs of which were curved so as to form the segment of a circle, and which opened sideways in the direction of the mouth, and *not vertically*,—a point strongly insisted on by M. Monin. The inside of each limb, at its extremity, was roughened with a file. This instrument, well oiled, was introduced with ease into the œsophagus of the patient, the left forefinger of the operator being placed over the root of the tongue and epiglottis. With a small degree of force the instrument now obliged the coin to place itself in a vertical position,

* And of fatigue also, if dancing can fatigue a Frenchman. "For a practitioner to whom he had first applied, recommended him to live on oil, and to *take to jumping*, to facilitate its entrance into the stomach, and for eight days he had religiously jumped as high as he could."

or with its rim upwards, and in a few moments it was seized by the forceps, and being firmly grasped, slow and gentle traction was employed. This was continued till the coin arrived in the pharynx, where, being arrested by the arch of the palate, it suddenly escaped from the hold of the operator. The pressure it now exercised over the glottis caused symptoms of imminent suffocation; but a sharp blow between the shoulders speedily caused the expulsion of the coin from the mouth.

The operator, who has a humorous way of reporting the case, says, "to make a bound, and dash after the object which had caused him so much terror and suffering, was the first impulse of the poor patient, who disappeared like a flash of lightning (*partit comme une éclair*), without paying the the least attention to my recommendation of moderation in diet after his long starvation. I did not see him for several days afterwards, when he complained of nothing but a little soreness at the point where the piece of money had been impacted. He experienced no other ill effects from his imprudence."

MEDICO-LEGAL MATTERS IN FRANCE.

The Royal Court for the dep. Lower Seine has been somewhat recently occupied with a trial of much interest to the medical men of the department. In December last, a woman, pregnant of her seventh child, being attacked with feverish symptoms, sent for her midwife, who, possessed with the idea that labour would be protracted, urged for medical advice, and a M. Cormon, an *officier de santé*, was at length called in. This practitioner treated the patient first for her fever, bleeding her and prescribing (probably) antiphlogistic medicines. He then waited for the efforts of nature to continue the labour; but after some hours, becoming convinced that the labour demanded assistance, he requested to have the further aid of a medical graduate; the family, however, with perfect confidence in his own abilities, refused to obtain other assistance. Meantime the condition of the woman grew worse, even critical; and at length M. Cormon found himself reduced to the alternative of turning the child or embryotomy to secure the chance of life for the mother. The details of the case are meagre (as given by L'Experience quoting the Gaz. de Tribunaux); but we gather that turning being difficult and dangerous to the mother, the presentation being probably natural,—and, moreover, conceiving the fœtus to be already dead,—M. Cormon resolved on the performance of embryotomy, which operation he effected so successfully that in about four days the woman was convalescent.

This circumstance made a great noise among the gossips of the neighbourhood, who raised an outcry against M. Cormon, that "having been unable to deliver the woman, he had cut the child in pieces." The rumour having reached the primary court of Dieppe, a process was instituted against Cormon. The tribunal, on the grounds that the child being presumed alive, in the absence of evidence by Cormon to the contrary, and that as a mere *officier de santé* Cormon had no right to perform embryotomy unsanctioned by the presence of a graduate in medicine or surgery, declared the accused guilty of involuntary homicide, and sentenced him to three months' imprisonment. From this decision appeal was made to the Royal Court at Rouen. In the defence here it was alleged that turning could not have been performed with safety to the mother; but that her safety demanded the having recourse to the destruction of the infant; and several strong testimonials in favour of the proceedings of Cormon, from medical practitioners of the department, were brought forward. After a short deliberation the court decided in the ensuing terms:—"According to the evidence presented, it appears that Cormon was justified in performing embryotomy, the woman being in a most critical situation, and having during many days suffered from the effects of protracted labour. Seeing, also, that there is reason to believe the child was already dead; that in all probability the mother would have succumbed if the accoucheur had not had immediate recourse to embryotomy; and that, far from the operation having any injurious effect on the woman, her health was in a few days afterwards re-established, thus proving not only the necessity of the measure but the ability of the operator,—this court quashes the decision of the lower court, and thoroughly acquits Cormon."

Before making any comment on the above case, let us contrast it with the following:—

On the 17th of June last, at three o'clock in the morning, the commissary of police for Montmartre was hastily sent for on account of a supposed suicide committed by a woman. On reaching the house of the occurrence a lodger informed him that on hearing deep groans issue from the room adjacent to his own, he had apprised the brother and sister of his fellow-lodger of the circumstance. The latter got the door broken open, and found their relative (a married woman, and pregnant) lying on her bed, with two pans of burning charcoal near her, and all the windows, &c., of the room hermetically closed. As the life of the suicide was not yet extinct, the sister ran out instantly to procure a surgeon. A young man, who happened to be passing in the street at the time, seeing her agitation, demanded of her what was the matter; and on learning

the cause said, "I am a surgeon myself; I will do all that is requisite here. Go you to the nearest apothecary, and ask him for the drugs necessary for such a case." Instead of confining himself to sending such medicines, the apothecary came himself, and on entering the chamber found there the *soi-disant* doctor, to whom he represented that bleeding without delay was the first of all means to be employed, and might, perhaps, have saved the patient, who was now dead. Some answers from the "doctor" soon showed that his adoption of that title was a mere usurpation: he had sat at the head of the bed for nearly an hour *doing nothing!* He was afterwards cited for the illegal practice of medicine before the police court, where he pleaded that having spent the night out he was somewhat intoxicated at the time of his meeting with the sister of the deceased. As there was no other proof that he was accustomed to practise medicine illegally, *and as this single instance did not appear to the court an adequate cause for punishment*, the accused was discharged WITHOUT COSTS (*renvoye des fins de la plainte*)!!—*Gazette des Hôpitaux*, July 22.

Compare these two instances (which in certain particuars may form a type of the state of medicine and its practitioners in our own country). In the latter case, a profligate—possibly a titled *roué* is allowed with impunity, in a case of the direst emergency, to usurp the functions of a medical man, actually offering no real assistance himself, and *shutting out the further search* after a medical man, who might possibly have been enabled to save the patient's life. In Cormon's case, a man of decided professional ability (as far as we can gather from a very superficial report), and a successful practitioner, is subjected to all the vexation and expense—perhaps ruin—of a prosecution for malpractice, when, after all, medical testimony is unanimous in praise of his proceedings. With respect to the knotty point of how far Cormon overstepped the limits of professional etiquette in performing his operation alone, we leave the settlement of it to "pures," presidents of colleges, *et hoc genus omne*, by whom etiquette has in certain recorded cases been studied before humanity. The emergency of the case in point, and the refusal of the family to call in additional medical aid, seem as much to have authorised Cormon to perform the operation of embryotomy as even a non-professional bystander is authorised by humanity in binding a garter or a handkerchief tightly around a limb, the artery of which may be cut through, and the patient dying from loss of blood. In either England or France, however, the public would be no longer liable to suffer through the starched laws of professional etiquette, if all medical men were subjected to an uniform routine of education, and formed ONE undivided FACULTY.

THE LANCET.

London, Saturday, August 12, 1843.

A FEW remarks occur, appositely, this week, in the able report of our Leeds correspondent, at page 715, on the condition of the work-people in some factories which occupied our attention last week in this department of THE LANCET, when we endeavoured to point out that *the domestic homes, and not the great workshops* of the kingdom, created much of the horrible misery, and the numerous bodily afflictions, that characterise at least the labouring townspeople of England. We recommend those remarks to attention. They come from a judicious and impartial observer. It is the stinking lodgings, hovels, cellars, floors, *homes*, of our countrymen that sicken the community, and reduce the average of public health. Dr. SAMUEL JOHNSON, sixty-five years ago, thus described one kind of life in holes:—"As to the sailor, when "you look down from the quarter-deck to "the space below, you see the utmost ex- "tremity of human misery,—such crowding, "such filth, such stench! A ship is a pri- "son, with the chance of being drowned; "nay, it is worse in every respect, worse "air, worse food, worse company." Bating the matter of the company, with which we have no concern, our English ARISTARCHUS wrote not far from the truth, although half a century before the materials were in existence for proving the correctness of his assertion by figures. We gather from Dr. WILSON'S Medical Returns that the average mortality of the navy at that period was 7.2 per cent. *of the persons employed*, whereas in the rural districts, among those between 17 and 35 (people of the same average age as sailors), the average mortality barely reached 1.2 per cent., and that of London at the same ages only 2.2, the total mortality of England and Wales being then double of what it is at present. What a change, however, has since taken place, owing, partly, to the

improvement in medical practice, but more particularly, and in a far greater degree, to the admirable plans now adopted for insuring proper ventilation and diet; the annual mortality of the navy now scarcely exceeds 1.6 per cent! The same fact, with some modifications, applies to the prisons of England, which, from having been little better than pest-houses, have become so healthy, that even in the Milbank Penitentiary, long notorious for its insalubrity, the sickness and mortality are little above those that are incidental to out-of-door employments in the metropolis. We would to GOD that the same statement were true respecting the health of the working classes in our great towns, as expressed in recent returns; but we have already disclosed facts that prove the great surplus of mortality in busy towns; and have shown, moreover, that the evils of shortened life, premature widowhood, and juvenile orphanage, fall in a much greater degree on the *working classes* who are badly lodged and provided than on their wealthier neighbours, though all are more or less affected by a residence in *large towns*.*

We shall, not only by way of refreshing our readers' memories, but in order to present the facts in their true and fullest light, embody our former allegations in a table, based on the Mortuary Registers of 1838—9, selecting *districts of equal population*, each comprising about three millions and a half of inhabitants, *but of very different extent*.

Districts.	Area per square mile.	Deaths registered in 1838-9.	Inhabitants to square mile.	Annual Mortality.	Deaths per cent. at 70.
Country Districts.	17,254	129,628	206	1 in 54.9	21
Town ditto...	747	197,474	5045	1 in 38.2	9
England & Wales	57,805	681,510	265	1 in 46	14

Our remarks will not be ill-timed, inasmuch as the Commissioners on the Inquiry respecting the Health of Towns have now, we hear, proceeded on their tour into the manufacturing districts, to investigate the nature and extent of the evils that may be found to exist, with the view of pointing out the remedies, or sorts of remedies, by which their cure may be expected; and we take this opportunity of expressing our satisfaction at the talent and unflinching honesty with which Dr. DUNCAN, in his pamphlet on the "Physical Causes of the High Rate of Mortality in Liverpool," careless of bad or good report, has exposed the hygienic evils suffered by the townspeople of Liverpool, who are greatly his debtors on that account, and who will by-and-by acknowledge the fact.

The comparative tables of mortality in towns which we gave last week, quite confirm what Dr. DUNCAN has advanced, namely, "that, judging from the annual proportion of deaths to the population, Liverpool is the most unhealthy town in England." Indeed, it cannot well be otherwise,—for first, *one fourth* of its inhabitants live in courts, mere *culs-de-sac*, with a narrow opening at one end, so close that the wretched tenants can scarcely see the sky, and so filthy, from accumulated excrementitious matter, as to promote, if not generate, malignant fevers; secondly, a *tenth part* of the whole population dwell in cellars, about two-fifths of which are either damp or wet; thirdly, out of two hundred and forty-three streets in Liverpool inhabited by the working classes, only *one fifth* (in mileage) are

* It is remarkably injudicious and absurd in benefit societies and insurance companies that they have not more accurate tables to show the varying rates of mortality at different ages in town and rural districts. Mr. EDMONDS (the able author of some papers on Vital Statistics in THE LANCET during 1835—6) has published the following differential scale of the average chances of life at different ages, the only one of the kind that we remember to have seen *scientifically* calculated:—

Age.	Rural Districts.	Towns.
0	39.5	33.
10	48.3	41.4
20	40.9	34.7
30	33.8	28.5
40	27.1	22.5
50	20.5	16.7
60	14.	11.
70	8.7	6.5
75	6.6	4.8
80	4.9	3.5

Life Tables p. 32.

These, however, by no means meet the demands of friendly societies, insuring *live* lives in crowded towns.

provided with sewers; and, fourthly, the density of its population in the district so inhabited is nearly *three times* that of the population in London. Such are, in substance, the statements of Dr. DUNCAN (founded on authorised returns to the town council) respecting the evils that are incidental to the habitations of the industrious classes in the first port of Great Britain. The reader may make what reflections he pleases on the conduct of a corporation that has until very lately left such glaring defects unremedied. A strict enforcement of the local Act that came into operation last November (very loosely and unsatisfactorily framed, however, in our opinion) should remove the noxious agencies, and so lengthen the average life of the working population.

The physical evils, however, that have been alleged respecting Liverpool — the vicious construction of dwellings, insufficient supply or total absence of out-offices and receptacles for refuse and excrementitious matter, the absence of drains, the deficient sewerage, and the over-crowding of the population, may be charged, in a greater or less degree, against most of the leading "industrial" towns of England and Scotland, as is abundantly proved in the distressing evidence brought before the Commons' Committee on the Health of Towns, and in the very complete Local Sanitary Reports furnished by Drs. HOWARD, DEHANE, BAKER, NEIL ARNOTT, and LAURIE, and other professional men resident in great towns, to the Poor-law commissioners. Out of a large number of such statements we take a few, at random, to illustrate our meaning. Dr. E. KNIGHT says, respecting Stafford,—

"Those parts of the town inhabited by the lower classes are without drainage, and the houses built without any regard to situation or ventilation, constructed (with usually only two small rooms) in a manner to ensure the greatest return at the least possible outlay, and without any provision made for refuse dirt and excrementitious matter, which, as the least trouble, are thrown down in front of the houses, and left to putrefy and diffuse a constant malaria."—*Local Sanitary Reports*, p. 225.

Speaking of the condition of large classes of tenements in the manufacturing towns of Lancashire, Mr. PEARSON, surgeon to the Wigan Union, makes similar disclosures:—

"I am inclined to consider the filthy condition of the town as being the most prominent source of fever. Many of the streets are unpaved, and almost covered with stagnant water, which lodges in numerous large holes on their surface, and into which the inhabitants throw all kinds of rejected animal and vegetable matters, which then undergo decay, and emit the most poisonous exhalations. These matters are often allowed from the filthy habits of the inhabitants, many of whom (especially the poor Irish) are utterly regardless both of personal and domestic cleanliness, to accumulate to an immense extent, and thus become prolific sources of malaria, rendering the atmosphere an active poison. It may be also mentioned, that in many of these streets there are no privies; or if there are they are in so filthy a condition as to be absolutely useless. The absence of such accommodation must necessarily increase the quantity of filth, and thus materially add to the extent of the nuisance."—*Ibid*, p. 264.

Information, that we have obtained from a private source, respecting Manchester, Sheffield, and Nottingham, quite confirms the fact that these melancholy truths are applicable to their lower districts, and that the prevalence of narrow streets and unventilated, unsewered courts, leads always to the same results, namely, a large fatality from epidemic and infantile diseases. Indeed, we might as clearly mark down on the maps of these towns the seats of such diseases, as they have been noted in the maps of Leeds and Bethnal-green, attached to Mr. CHADWICK'S report. It is only just, however, to mention that in Manchester, more than any other town, great efforts have been made to improve the streets (under the Act 9 Geo. IV.), of which no less than one hundred and forty-six streets have been paved and sewered, the total length of new sewers being eighteen miles! And yet *much remains to be done*.

Dr. NEIL ARNOTT, who, with Mr. CHADWICK and Dr. ALISON, visited the lowest purlieus of the old town of Edinburgh, presents a still more deeply-coloured picture of the misery of its poorer inhabitants:—

"We entered a dirty low passage, like a house-door, which led from the street, through the first house, to a square court immediately behind, which court (with the exception of a narrow path round it, leading to another long passage through a second house) was occupied entirely as a dung-receptacle of the most disgusting kind. Beyond this court the second passage led to a second square court, occupied in the same way by its dunghill; and from this court there was yet a third passage leading to a third court and dung-heap. There were no

privies or drains there, and the dung-heaps received all filth which the swarm of wretched inhabitants could give; and we learn that *a considerable part of the rent of the houses was paid by the produce of the dung-heaps*, the dwellers in these courts thus converting their shame into a kind of money for paying their lodging! The interiors and inmates corresponded with the exteriors; we saw half-dressed wretches crowding together to be warm, and in one bed, though in the middle of the day. Several women were imprisoned under a blanket, because as many others had on their backs all the articles of dress that belonged to the party were then out of doors in the streets. Who can wonder that pestilential disease should originate and spread in such situations?"—*General Sanitary Report*, p. 24.

Dreadful is this picture, yet are there close at our doors,—in St. Giles', Saffronhill, the wretched purlieus of Westminster, and the abodes of the poor weavers in Spitalfields,—squadrons of streets that exhibit an equal amount of misery and disposition to disease; and if such districts, so close and unprovided with ventilation and sewerage, bore *now* so large a proportion to the whole metropolis as they did before the great fire of 1666, there can be no doubt that epidemics would now, as then, carry off, occasionally, about a fourth of the inhabitants. In Glasgow and Greenock we find the same results, and a population, at the same time, the average duration of whose lives is proportionably shortened to about 37 years; whereas in Perth the average duration is 48 years. VILLERMÉ and PARENT-DUCHATELET show that in the Quartier de l'Hôtel de Ville, the Fauxbourg St. Antoine, the Quartier Latin, the purlieus of Montmartre, and other parts of Paris and its vicinity, the same train of evils flows out of the same causes.

Neglect of the habitations of the working classes damages their *moral* as well as their *physical* condition,—the fact is so much the more melancholy. The filthy inclinations engendered by residing in such dwellings, pent up,—stewed,—of all ages and *both sexes*,—huddled like swine, work two mischiefs at the same time. They induce diseases that are peculiar to such districts, deteriorating the *vis vitæ*, rendering the inhabitants more prone to the attacks of nearly all diseases, but more particularly of the diseases just alluded to, and also of the organs of respiration, which experience the first effects of the poison; the results issue, first in fevers, generally typhoid, but also inflammatory and nervous; secondly, in that class of diseases of the lungs and air-tubes which indicate a general breaking up of the constitution, and are comprised under the rather vague term of "consumption." With respect to the former there is no need to enter into the long-vexed question respecting contagion, on which, indeed, most of the best writers on fever are now pretty well agreed. The fact of fever being rapidly *extended*, if not *originated*, by over-crowding, imperfect ventilation, neglect of cleanliness, or all conjointly, is established by the concurrent testimony of every experienced man. The black-hole of Calcutta destroyed *one hundred and twenty-three* out of *one hundred and forty-six* prisoners in one night, owing to the substitution of mere human miasms for a healthy, thoroughly-oxygenated atmosphere, and the remaining twenty-three were afterwards attacked by a fever of typhoid character; jail fevers, hospital fevers, ship fevers, and camp fevers, are all traceable to one and the same cause; and as long back as the reign of ELIZABETH the fatal typhus at the Black Assize of Oxford carried off the judge and sheriff, and *three hundred* other persons, who contracted the infection from the prisoners in the court.

The same causes, so well described by Dr. DUNCAN, are in operation in the crowded courts, cellars, and lodging-rooms of Bethnal-green, Liverpool, Manchester, Leeds, and Sheffield. Here fevers almost always prevail; different, indeed, at different seasons, and much more so in autumn and winter, occasionally prevailing (as we might easily show) to such an extent and with such fatality as to assume the phase of a regular pestilence,—clearly induced by the above causes, inasmuch as in the denser parts of towns the mortality from fever rises as high as 6. per cent. of the total deaths, taking an average of the five most populous towns of England; whereas in the suburban districts it scarcely reaches 3.5 per cent. With respect to consumption, one of the forms of the hydra-headed scrofula, Sir JAMES CLARK tells us that "the respiration of a deteriorated "atmosphere is one of the most powerful "causes of tuberculous cachexia; and if "an infant born in perfect health and of the "healthiest parents be kept in close rooms, in "which free ventilation and cleanliness are "habitually neglected, a few months will "often suffice to induce tuberculous ca-

"chexia," and, moreover, "the respiration "of polluted air will augment the hereditary "disposition to scrofula, and even induce "such a disposition *de novo*." The truth of these remarks has been very strikingly proved by experiments on animals, as well as by the experience of tuberculous diseases contracted under very peculiar circumstances by the human subject. Need we, then, wonder that in the close, pauperised settlements of large towns, such as Vauxhall-road and the Exchange-ward of Liverpool, Little Ireland and Ancoats in Manchester, White chapel and Bethnal-green, in London, the mortality from such causes is excessive, showing itself in an unusual degree in early life, thereby greatly lessening the probability of life, and *manifesting itself more particularly in scrofulous diseases?* As, however, both epidemic diseases and those diseases which affect the respiratory organs, prevail to an extent that is very different in different towns, *influenced always by the mode of lodgment, &c. in each*, we have, at some labour, calculated, from the returns of three years, the annual mortality (compared with the total deaths) by epidemics and lung diseases in twelve *town* districts, compared with one *country* district.

	Epidemic.	Lung Dis.
Liverpool	26.5	27.1
Manchester and Salford	27.76	24.1
Sheffield	24.39	25.06
Norwich	25.69	23.9
Nottingham	24.17	23.9
Leeds	23.83	22.18
Hull	24.56	21.76
Bury	23.7	24.3
Derby	20.5	28.37
Birmingham	22.35	25.6
Bristol	20.4	22.4
Potteries	17.8	26.7
Devonshire	17.4	20.

These melancholy facts respecting *two classes* only of disease, ought to awaken the energies of those in whose power it lies to remove the causes. The time has, we hope, arrived when the Legislature itself will compel house-proprietors and town-councillors to be humane, even against their will, and *according to law*.

ELEVENTH ANNIVERSARY MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION,

Held on August 2nd and 3rd, 1843,

AT LEEDS.

(Continued from p. 670.)

(*From the Correspondent of* THE LANCET.)

THE proceedings of the association were commenced, on Wednesday morning, by the meeting of the council, at eleven o'clock, at the rooms of the Leeds School of Medicine. An outline of the report on the state of the association (of which "outline" we gave an ample sketch last week) was presented and adopted, and arrangements were made for conducting the meetings, and other business was transacted.

THE FIRST GENERAL MEETING

was held in the Theatre of the Philosophical Hall, Park-row, at about one o'clock. About one hundred members were present.

Mr. J. H. JAMES, of Exeter, took the chair. He would say but a few words before vacating it. Seeing around him what men had filled that chair, he felt that the post was one of great honour. He could only wish that he had acquitted himself in it to the satisfaction of the members. He now resigned office to his successor. The name of Hey, he was sure, would be hailed with pleasure by the association; of no name could provincial surgeons be more proud. It was written in the imperishable pages of history, was venerated in the past, and would be esteemed throughout the future.

Mr. HEY, on taking the chair, was received very enthusiastically. He returned thanks for his new honour, mentioning that he had for many years suffered from a disease of the lungs, which prevented him from making any great exertions in speaking. He had prepared an address which a junior member of his family would now read. It explained why the association had not met earlier in Leeds. One cause was the illness of their leading medical men, one of whom, Dr. Hunter, was since deceased; another was the alterations making in the Museum of the Philosophical Society, and the subsequent arrangement of the museum, which had taken more time than was expected. He then, in accordance with a precedent in the association, sketched the history of Leeds, and directed attention to the various localities, institutions, and spots in the neighbourhood which were likely to interest the members. He gave slight descriptions relating to the infirmary, the dispensary, and the House of Recovery, or Fever Hospital. The School of Medicine had been founded

twelve years, and many of the difficulties attending its origin were now overcome. They had a plentiful supply of subjects for dissection, and the pathological museum was worthy of notice on account of several interesting morbid specimens which it contained. As to the all-absorbing subject, medical reform, he considered that reform must be *gradual*.* The great object must be to get an uniformity of external privileges. Internal regulations must form secondary considerations. Amongst the latter he would suggest that some code of medical ethics should be drawn up, by which the conduct of medical men towards each other should be regulated, especially in relation to their patients. He was anxious that the benevolent fund of the association should receive attention. He would also recommend that societies similar to the West-Riding Medical Charitable Society, should be formed in districts where there were no institutions of the kind. It had effected much good in the West Riding, and was well worthy of imitation. He then alluded to Dr. Hastings, as the originator of the association, and his labours as secretary up to the present time, and called upon him to read the report.

Dr. HASTINGS then read the document, of which a view was presented in last week's LANCET. The summary of the finance-sheet stood thus:—

Income with balance of last year	2092 16 4
Expenditure	1478 19 9
	£613 16 7

Dr. KENNY, of Halifax, moved that the report of the council now read be adopted and printed.

Mr. SALMON, of London, seconded the motion, and regretted that so little had at present been done towards obtaining medical reform. The Government, amidst the pressure of important questions, might not have had time to attend to this subject, but the members of the medical profession ought to seize every opportunity of impressing upon ministers the necessity of a change. Medical men should announce to members of Parliament, personally or individually, that no modifications of existing charters would satisfy the profession. That a thorough reform of all medical law was needed. To advocate this in London was dangerous. He had himself suffered from doing so, but he believed that until the medical profession, fearless of personal consequences, demanded a change, little would be done on its behalf. (The motion was passed unanimously.)

Mr. NORMAN, of Bath, after adverting to the scientific character and eminent position, as a surgeon, of the retiring president, moved, "That the thanks of this meeting be given to Mr. James, of Exeter, the retiring president, and that he be elected a vice-president of the association." Seconded by Dr. JEFFREYS, of Liverpool, and carried by acclamation.

Mr. JAMES, in returning thanks, said that all provincial surgeons ought to support this association, for which he was himself willing to do whatever laid in his power.

Dr. GOLDIE, of York, proposed, "That thanks be given to the secretaries, Dr. Hastings and Mr. Sheppard, for their services during the past year." Seconded by Dr. CONOLLY, of Cheltenham.

A letter was read from Mr. SHEPPARD, stating that, as his colleague, Dr. Hastings, was about to resign, he begged to tender his resignation also.

The resolution being carried,

Dr. HASTINGS returned thanks. It was one of the most fortunate circumstances of his life that he had become connected with the association. The duties of the secretaryship were now very great, and professional avocations and domestic anxieties prevented his attending to them as he desired. He would take any position they might wish, but whether merely as a member, or filling any official position in it, he should never cease to be interested in its welfare.

Mr. SODEN, of Bath, proposed an alteration in law II., namely, that instead of two secretaries there be one, and that Dr. STREETEN, of Worcester, be that one, with a salary of £100 per annum. This motion, which was seconded by Mr. NEWNHAM, of Farnham, produced much discussion between Dr. HASTINGS, Dr. FORBES, Dr. SHAPTER, Mr. WHITING, and other members. Some thought that although the duties of secretary were onerous enough to deserve payment, yet that a salary would abolish its honorary character. On the other hand, many members thought the £100 per annum quite inadequate for the services. Mr. SODEN's original motion was, however, ultimately agreed to, with the alteration of guineas for pounds.

Dr. STREETEN thanked the association for electing him. He should omit nothing in his power by which he could advance its interests.

Dr. CONOLLY, of Hanwell, moved "That a permanent president be appointed to the council, who should act as treasurer, and that Dr. Hastings be requested to accept the office of president to the council."

* A gentleman, once adopting the same view with regard to political measures, in a conversation with Earl Grey, on the same ground, probably, that all important changes were dangerous, from the effects producible by sudden alterations in the affairs of men, was very quietly and appositely asked by his lordship,—"Pray, Sir, if one of your children fell into the fire would you desire your servant to pull him out *by degrees*?" The question will do for our respected brother, Mr. Hey.

Dr. HASTINGS accepted the office, from his unalterable attachment to the association, and its principles.

Mr. M. HALL, of Wortley, moved, "That the thanks of this meeting be given to the council of the past year, and that they be requested to continue their services, with the following additional members, and empowdered to add to their number:—W. B. Dighton, Esq., Northallerton; F. Earl, M.D., Ripon; M. Jackson, Esq., Market Weighton; J. Muscroft, Esq., Pontefract; J. Outhwaite, M.D., Bradford; E. J. Shearman, M.D., Rotherham; C. Durie, M.D., Blackbury; F. E. Headlam, M.D., Newcastle-on-Tyne; Sir John Fife, ditto; C. Wightman, M.D, ditto; J. Dickinson, M.D., Liverpool; W. Bainbrigge, Esq., ditto; J. Inglis, M.D., Halifax; C. F. Favell, M.D., Sheffield; Cordon Thompson, M.D., Sheffield; Henry Thomas, Esq., Sheffield; Ferguson Branson, M.D., Sheffield; Henry Dunn, Esq., Wakefield; Thomas G. Wright, M.D., Wakefield; W. Marsden, Esq., Skipton; A. Jubb, Esq., Halifax; M. S. Henry, M.D., Halifax; Thomas Rayner, Esq., Birstal; Henry Hemingway, Esq., Dewsbury; Edward Scholfield, M.D., Doncaster; James Craig, Esq., Finsbury; Joseph C. Cookworthy, M.D., Plymouth."—Seconded by Mr. SIBSON, of Nottingham, and carried unanimously.

Dr. BARLOW, of Bath, then moved, "That the central council be empowered to act on behalf of the association in all matters connected with medical reform for the ensuing year, and that on all points on which they may deem peculiar consideration requisite, they be requested to seek counsel, as their discretion may direct, from the following members, viz.:—Edward Barlow, M.D., of Bath; Sir James Clark, Bart., London; John Forbes, M.D., London; Charles Carter, Esq., Newcastle-on-Tyne; Thomas Martin, Esq., Reigate; Richard Carmichael, Esq., and the vice-presidents."

Dr. WILLIAMSON thought it would be better if this meeting at once appointed a deputation to explain to the Government their views on medical reform. None of the memorials had been followed by a personal interview, which at this moment was of great importance.

Mr. NUNNELEY, of Leeds, commended this suggestion. Sir James Graham had stated in the house that the Government was about to renew the charter of the College of Surgeons. No measure of reform could be satisfactory which contemplated the renewal of existing charters.

Dr. WILLIAMSON promised to bring the subject before the meeting in the evening. The secretary then called on

Mr. NUNNELEY, who read a paper in favour of *operating for cataract where only one eye was affected*, illustrated by cases in which he had operated with success. One of the patients was now present. None of the ill consequences apprehended from this operation, such as confusion of vision, or a double impression from external objects, had taken place in the case, and the sight appeared to be in all respects quite perfect.

Mr. T. P. TEALE described two cases, which he had previously published, of *excision of the upper jaw for the removal of tumours*, because he had an opportunity of exhibiting the patients themselves to the association. Drawings of the parts made previously to the operations, and preparations of the parts removed, were exhibited. One patient was a girl, sixteen years of age; the other was a lad aged seventeen years. The operation had certainly perfectly succeeded, the patients presenting striking contrasts with the frightful deformity before existing.

Mr. WM. HEY, jun., also exhibited a patient from whom he had removed a large portion of the lower jaw. The tumour was of very large size, and the remaining deformity very little.

At half-past five o'clock the meeting was adjourned.

MEETING IN THE EVENING.

The chair having been taken, Dr. WILLIAMSON proposed his motion respecting the expediency of appointing a deputation to wait upon the Government to explain the views of the association with regard to medical reform. Active steps should henceforth be taken on this subject. Every effort should be made to frustrate attempts of the minister that would not be satisfactory to the great body of the profession. Whatever was done the association ought to take care should be done well. He moved,—

"That considering the incalculable importance of medical interests, both public and professional, in the great question of medical reform, and the peculiarly critical circumstances in which the question is at present placed, a deputation of members be appointed to obtain, without delay, an interview with her Majesty's Government, in order to explain those sound principles of medical legislation which it is believed will alone be satisfactory to the profession, and conducive to the welfare of all classes of her Majesty's subjects."—Seconded by Dr. ROBERTSON, of Northampton.

Dr. THOMAS SMITH, of Leeds, opposed the motion. If each individual of the profession acted uprightly and justly there would be no need of reform. The spirit of monopoly prevailed as much in provincial hospitals and country medical schools as in the colleges of London. If all medical men acted justly in their several positions in the profession reform would in that manner be accomplished.

The motion, however, was carried, the appointment of members to the deputation being deferred until the next morning.

Dr. Conolly, of Cheltenham, then read a report relating to the

BENEVOLENT FUND.

It stated that the central committee for its management, after a suspension of their operations for more than two years, had resumed their labours, and given relief to twenty cases of distress and destitution; in each case the aid afforded having been of the greatest value to the recipients and their families. The amount of distress and patient suffering that exists amongst the members of our profession is (said the report) but little known even amongst ourselves; or could the number and nature of the appeals made be generally known, they would irresistibly speak to the benevolent feelings of every member of the profession. Since the anniversary meeting held last year at Exeter, two hundred and forty-seven pounds have been expended by the committee in charitable aid to the twenty persons mentioned. Amongst them have been descendants of some of the greatest men named in the annals of medicine, but whose fame and labours had not sufficed to protect their descendants from poverty or the reverses of fortune. One most gratifying fact the committee would particularise:—A few years since they assisted a general practitioner, whose health having failed him, was reduced with his family to great distress; the assistance was most opportune; he recovered and resumed practice, and has now become an annual subscriber to the fund. But the treasurer's account showed that the available fund is again at a very low ebb, and the good to be done this year will depend upon the amount of annual subscriptions received. The committee, therefore, recommend to all the branches of the association the example set by the southern branch, at their last annual meeting. They have appointed three stewards in different towns and counties of their branch, for the express purpose of collecting subscriptions in aid of the fund, to be forwarded to the general treasurer. If universally followed a large sum might be collected. The increase of subscriptions in the past year, as compared with any former year, is especially due to several non-professional contributors, and to ladies who have made collections for the fund. But while there has been an increase of the annual subscriptions the donation fund has not received proportionate augmentation, although that is a very important feature of the charity, as a means of advancing loans to those in temporary difficulties, or small annuities to the aged and infirm. They, therefore, beg earnestly to direct attention to this branch of the fund, in the shape of donations and bequests.

J. Baron, M.D., President.
W. Conolly, M.D., Sec. and Treas.

The Cases Relieved during the past Year were

1. A practitioner of high character, with a wife and seven children, unsuccessful in obtaining practice in England, decided to emigrate to Australia; a subscription for which purpose was raised by his friends, to which ten pounds was contributed from the fund.

2. A general practitioner in London, formerly in Hampshire, highly recommended by men of eminence in Hants and Wilts, with a wife and family, in great distress, from long illness. Received ten pounds.

3. A widow in Warwickshire (left destitute with a young family), after a tedious illness, contracted in practice, received ten pounds.

4. A widow in Shropshire, reduced to seek parochial relief, ten pounds.

5. A widow and family in Gloucestershire, to assist in educating the children, ten pounds.

6. An aged medical man in Yorkshire, ten pounds.

7. An aged member of the profession, so reduced as to become the inmate of a county hospital, ten pounds.

8. The aged widow of a most respectable surgeon in Middlesex, with a daughter, totally unprovided for, ten pounds.

9. A general practitioner in Gloucestershire, with a wife and fifteen children, had a bill for sixty pounds becoming due, which he was unable to meet, and his ruin appeared inevitable; the committee advanced one half of the sum, the remainder being raised amongst his friends.

10. The daughter of a once celebrated professor at Edinburgh, god-daughter of the great Cullen, in advanced life and great distress, twenty pounds.

11. A distressed mechanic, son of a medical man, known to Dr. Hastings, two pounds.

12. A youth, the descendant of a physician, one of the greatest benefactors of the human race, in poor circumstances, and without education, apprenticed by the committee to a bookbinder and stationer—the fee, forty-five pounds.

13. The wife of an inmate of the Pauper Lunatic Asylum at Hanwell, five pounds.

14. A wife, towards enabling her to join her husband in Australia, five pounds.

15. A widow with eleven children, in Suffolk, pregnant of her twelfth child, all utterly unprovided for, ten pounds.

16. A widow and seven children at Liverpool, twenty pounds.

17. A son (Hereford) to assist in placing him in a situation, ten pounds.

18. A practitioner at Bath, with a wife and three children, in bad health and very distressed, to enable him to visit the coast of Devon for his health, ten pounds.

19. A daughter in Warwickshire (one of eighteen children) in such bad health as to

be unable to support herself at sixty-seven years of age, five pounds.

20. A widow in Norfolk, sixty-nine years of age, and distressed, five pounds.

Donation Fund.

	£.	s.	d.
Balance in hand, July 1, 1842 ..	395	15	11
Donations to June 30, 1843	37	9	0
Interest for the year.....	10	8	2
Balance in hand	£443	13	1

Subscription Fund.

	£.	s.	d.
Balance in hand, July 1, 1842 ..	141	2	6
Subscriptions to June 30, 1843..	137	2	0
	£278	4	6

	£.	s.	d.		
Twenty distressed applicants	247	0	0		
Printer's bill....	9	11	0	257	1	0
Postage and stationery	0	10	0		
Balance in hand				£21	3	6

Mr. NEWNHAM, of Farnham, proposed the adoption of the report, and that thanks should be given to the committee for their efforts to promote the objects of the fund. He lamented that it had not more subscribers. The good effected was very small compared with what might be done with larger funds. Every member should exert his efforts to increase them. Seconded by Mr. HEY, Jun.

Dr. COWAN, of Reading, considered the amount of the fund as unworthy of the association. Voluntary efforts on its behalf could be expected to do little for it; but if the subscriptions were raised from one guinea to thirty shillings, £700 per annum more would be given to the benevolent fund.

Dr. WILLIAMSON thought this would be making the association a charitable institution, which was not contemplated at its formation. Its object was the advancement of medical science. He was not opposed to medical charitable institutions, but thought they could be rendered much more efficient by being made local instead of general. He commended, as an example, the West-Riding Medical Charitable Society.

Mr. GARLICK, of Leeds, and other members, coincided with Dr. Williamson.

Dr. COWAN stated that he should move at the next meeting of the association that the subscription be increased, and the surplus added to the benevolent fund.

Mr. WM. HEY, Jun., was then called on by the chairman to read the

RETROSPECTIVE ADDRESS ON SURGERY.

The author commenced by reverting to what had been done in *descriptive anatomy* during the past year. In this field little could be expected, and the more particular account of the muscles of the face, throat, coccyx, &c., by Kiel, the papers of Dr. Knox on the anatomy of the brain and its membranes, and Paget's remarks on the relative size of arteries and their trunks, were the most important contributions it had received. In *minute anatomy* much had been done by means of the microscope, and an able summary of the labours of various individuals had been given by Mr. Paget. The origin of all tissue from the cell was still a disputed point. Mr. Gulliver maintained that primitive fibres might be produced in tissue, as the fibrine of the blood always coagulated in the form of fibres. The ultimate structure of muscle was still a contested point, but the views of Dr. Martin Barry seemed to be gaining ground, and had been confirmed by Dr. Carpenter and Mr. Dalrymple. The question of the vascularity or non-vascularity of cartilage seemed to have been decided by the investigations of Mr. Toynbee, who had demonstrated that not only cartilage, but the cornea, the lens, and the dermoid appendages, were destitute of a vascular structure. Mr. Bowman's paper on the anatomy of *the kidney* had led to a knowledge of the nature and probable function of the Malpighian bodies, and pointed out the resemblance in the mode of performing these functions between the kidneys and liver. The anatomy of *the spleen* had been further prosecuted by Boucheret, and its function been the subject of much discussion, but nothing certain with regard to its function had been elicited. The author concluded this part of his address by alluding to the labours of Poiseuille, on the movements of fluids in dead and living tubes, and on the theories of spontaneous hæmorrhage.

In practical surgery contributions had been made to our knowledge of *diseases of the skin* by Messrs. Burgess, Phillips, Wilson, and Erichsen. Mr. Wilson had proposed a new classification, which had some advantages over that of Willan. In the treatment of cutaneous diseases little had been done. The ioduret of sulphur had been recommended in porrigo favosa, and in dartrous eruptions iodine and the hydriodate of potass had been found successful. Naphthaline had cured psoriasis, and the chloride of zinc was recommended as an application for lupus. With regard to vaccinia, its identity with variola had been proved by Mr. Ceeley. M. Serres had advanced the opinion that small-pox was of insect origin. Liechtenstein had found that matter from the pustules produced by tartar-emetic ointment produced a disease similar to cow-pox, and that persons so inoculated were not liable to the infection of small-pox. From the statistics of small-pox after cow-pox it might be inferred that there is necessity for revaccination every ten or twelve years. Two cases

of small-pox in utero had been reported during the past year.

In the treatment of *burns and scalds* two new plans of treatment had been recommended; first, the application of nitrate of silver; and, secondly, the smearing the part with mucilage of gum arabic. Mr. Erichsen had written a paper on burns and scalds, in which he supposed that the fluid not carried off by the destroyed skin was retained in the system, and produced injurious effects. Mr. Curling had pointed out the existence of inflammation of the duodenum as a common occurrence in burns. Mr. James had been very successful in removing by operation the deformities which exist from cicatrices after burns.

The rage for *myotomy* was somewhat giving way. It had been found of little use in most cases of *spinal deformity* for which it was recommended. Mr. Syme says that where spinal deformity co-exists with wry neck, the operation may relieve. Division of the muscles of the eye had been proposed for other diseases besides strabismus, as amaurosis, myopia, and done with some success. M. Joubert had performed this operation where compound fracture could not be reduced without it, and the author had performed it in a case of dislocation of the ankle.

For compound *fracture*, a bran-dressing had been proposed, the advantages of which were that it produced no pressure, and assisted in arresting the hæmorrhage. Some cases of fracture of the clavicle had been recorded, in which no displacement had taken place. M. Lisfranc had proposed the use of the stethoscope in detecting fractures near joints for the purpose of distinguishing crepitus.

Four cases of removal of the superior and inferior *maxillary bone* had occurred during the year. Two of them had been performed by Mr. Teale, of Leeds, and one by the author of the address.

Mr. Syme, of Edinburgh, had given an account of symptoms by which the *dislocation* into the ischiatic notch could be more easily distinguished, one of the principal of which was the altered form of the lower part of the spinal column. Two cases of dislocation of the elbow were recorded in which reduction was effected after they had been unreduced fourteen weeks and five months. A case of dislocation of the femur of nine weeks standing had been reduced by having recourse to the division of the muscles.

Of diseases of the vascular system, several cases of *aneurism* had been recorded. Amongst these a remarkable case in the practice of Mr. Liston, which occurred in a lad about ten years old. Mr. Liston believed that this was a case of abscess leading to the formation of an aneurism. Cases of bleeding from internal vessels by the opening of abscesses had also been recorded. The recorded operations for aneurism had not been numerous; the common iliac and the external iliac had been tied in America. The author dwelt on the importance of attempting to cure aneurism by treatment. It was sometimes cured spontaneously, and three cases had been related during the past year of the cure of aneurism by pressure. There was at that moment a case in the infirmary under Mr. Teale, in which pressure had been tried, and in which the swelling had been somewhat reduced.

Mr. Key had recommended the employment of trusses in *varicocele*. This was opposed to the theory of the treatment of this disease. The author lately had a case of hernia and varicocele together; a truss was applied for the hernia, and the varicocele had nearly disappeared.

In *nervous diseases* galvanism and electricity had been used with success, and a case of tetanus and another of aphonia had been cured by these means, which still led to the hope that these agents, if properly applied, would become a powerful means of relief in the hands of the surgeon and physician.

Hernia was still a disease of prominent interest. Cases had occurred of incorrect diagnosis, and some forms of tumour of the abdomen were with great difficulty distinguished from hernia. Lisfranc had made some observations on the reduction of hernia, in which he advocated putting the parietes of the abdomen into a state of semi-distention previous to attempting the reduction of the hernia. Cases had been recorded in which hernia had been reduced by the administration of large doses of opium. Belladonna had also been found to act favourably under the same circumstances. The author then made some observations on the question of how long the operation ought to be deferred. Two cases had been related during the year, one in which seven days had elapsed, and another three and a half days, before the strangulated intestine was relieved, and the patients did well. No time could be fixed, but delay in these cases was always dangerous, and the evil of operating too soon was much less than that of operating too late. In the operation for hernia there were but few cases in which the sac required to be opened. Where rupture of the intestine and extravasation of its contents had taken place, it was necessary. A question had been raised as to the protruding omentum, whether it should be cut away or returned. The author recommended in all cases that it should be cut away.

Dr. Ray had related four cases in which he had operated successfully for *ovarian tumours*. These tumours required a large incision for their removal. There was now much less fear than formerly of wounding the peritoneum, as it might be injured to a great extent without serious consequences.

The operation for *artificial anus* in the

lumbar region had been performed by Amussat for the purpose of relieving obstruction. A case had occurred in the practice of Mr. Teale, which, it is probable, would have been successful had it not been deferred to so late a period. Several cases of obstinate constipation terminating in death had been lately recorded; might not this operation have saved them?

In cases of *stone in the bladder* Dr. Willis had recommended, strongly, solvents to be injected. Satisfactory cases had not yet been recorded. Dr. Willis also advocated a new operation, lithectasy, which was performed by cutting down upon the urethra and dilating the prostate. Of this operation too few cases had been recorded to afford grounds for an opinion. Professor Dudley, of Kentucky, had given a very favourable account of his operations for lithotomy, of which only 4 patients out of 164 had been lost. The author had not calculated the loss at the Leeds Infirmary, but he thought it would not be found to be more than one in fifteen.

The author concluded the address by a notice of several surgeons and anatomists who had died during the past year, amongst whom were M. Larrey, Dr. Macartney, Mr. Walker, and Mr. Tyrrell.

The address occupied above two hours in the delivery, after which it was moved by Mr. JAMES, of Exeter, and seconded by Mr. ESTLIN, of Bristol, that the thanks of the meeting be given to Mr. Hey for his address, and that he be requested to publish it in the Transactions of the association.

It was moved by Dr. SIMPSON, of York, and seconded by Mr. TURNER, of Manchester, and carried, that Dr. Cowan, of Reading, be requested to read the Retrospective Address on Medicine at the anniversary meeting of 1844.

The meeting was then adjourned till the following morning.

THURSDAY, AUGUST 3rd, 1843.

PUBLIC BREAKFAST.

This took place at nine o'clock, in the large room of the Commercial Buildings. About one hundred gentlemen sat down to it, but most of the company having engagements for visiting the factories, by half-past nine o'clock the room was nearly cleared.

VISIT TO THE FACTORIES.

A large proportion of the members joined the party at the School of Medicine to visit Gott's, Marshall's, &c. mills. The mills first visited were those of the Messrs. Gott, cloth manufacturers, where every arrangement had been made for the convenience of visitors, and Mr. Dixon, a partner in the firm, conducted the party round. To many members the scene was quite new, and having been prepared, by misrepresentation, to witness a universal moral and physical degradation in the factories, their surprise was great on finding extensive, airy, well-ventilated rooms, and though filled with young persons of both sexes, they were looking happy and cheerful, and exhibiting an appearance of health and strength, and the visitors derived a new light respecting the charges brought against the factories. Of course in these mills none of the squalor and wretchedness presented itself which prevails in the town of Leeds at the present moment, as the result of the long-continued fearful depression in the trade of that town, the consequence of being *out* of the mills. Everything appeared to be done by the proprietors of this factory for the comfort of their work-people. We were shown into a very extensive piece of ground, which was laid out in allotments for gardens for the use of those who worked in the factory. Here all kinds of vegetables and flowers were cultivated, and looking as well as though thriving in the centre of a rural district, far from the oppressive air and smoke of an over-crowded working town. All factories, however, are not conducted so well as is Messrs. Gott's, which is well deserving of imitation.

From these mills we were conveyed to those of the Messrs. Marshall, where a flax manufactory is conducted. Here we were ushered into the new mill, one immense room on the ground-floor, covering two acres and a half of ground, occupied by machinery for spinning flax, several hundreds of girls being engaged in superintending the process. The arrangements for the comfort and convenience of the workers appeared complete. Although the work seemed monotonous, yet none of the children exhibited physical infirmity or moral depression. A medical friend observed to us, however, in passing, that the greater proportion had the light hair and eyes indicative of the scrofulous temperament.

From the floor of the building we passed straight to the external roof, where, instead of tiles and slates, was found a well-cultivated field, the only interruption on its surface being the conical skylights which admitted light into the factory below.

From the factory we went to the school connected with it, where we found between four and five hundred children in the course of training, some of whom worked during a part of their time only in the factories. The children all looked healthy, and the master stated that they were seldom absent on account of illness. We saw no enfeebled frames here, although in a town that is stated to be more destructive to the life of children than any in the kingdom.

GENERAL MEETING.

The members assembled at the Hall at twelve o'clock. There were some new members at the meeting of to-day. A list of

those who were present at all the meetings would be found to comprise 113 surgeons and 37 physicians, of which 32 gentlemen were residents in Leeds, the remaining parts of Yorkshire furnishing the majority of members attending the meeting from other towns and localities. The chair having been taken,

Dr. WILLIAMSON moved, and Mr. FLOWER seconded, that Dr. Riley, of Bristol, be requested to deliver the Retrospective Address on Anatomy and Physiology at the anniversary meeting of 1844.

The CHAIRMAN then called upon Dr. SHAPTER, of Exeter, to read the

RETROSPECTIVE ADDRESS ON MEDICINE FOR THE PAST YEAR.

Dr. SHAPTER commenced by adverting to the various papers that had been published during the past year on the microscopical characters of *the blood*, many points in which still remained doubtful. Several contributions had been made to our knowledge of the anatomy of the *nervous system*. Dr. Macartney had compared the brains of idiots and monkeys, and come to conclusions unfavourable to phrenology. Amussat had discovered fibres in the *gall-bladder and ducts*. Berzelius had given a new analysis of *bile*, which he concluded was an excretion, in opposition to the views of Liebig. Dr. Robert Lee had again dissected the nerves which supply *the uterus*, and there was now no doubt of the correctness of his views. Todd and Kesteven had recorded cases of maternal impressions producing an influence on *the fœtus*, and there was a disposition to attend to this question as important. Carus had related a case of *menstruation* in a child only two years old. Raciborski had examined the milk of women during menstruation and found but little difference in its composition, and concluded that women might nurse although menstruation continued.

In the department of pathological anatomy Bennett had described two kinds of softening of *the brain*, of which the symptoms were distinct, and which were readily distinguishable by microscopical characters. Abercromby had given a physiological explanation of the phenomena of *stammering*, in the hope of preventing the system of cutting, now sometimes had recourse to for curing that defect. Several cases of *slow pulse* had been recorded; one by Fletcher, in which there were only twenty-eight pulsations in the minute, and another by Holberton, in which there were but seven beats in the minute.

Amongst diseases of the chest the labours of Dr. R. Williams for the cure of *phthisis* deserve to be recorded. He had tried every remedy which had been recommended for its treatment without alleviation of the disease. He had also made observations on the weight of persons in phthisis. There was frequent increase of weight during the progress of the disease, but the periods of increase were fast succeeded by periods of wasting. Dr. Hastings, of London, had drawn attention to naphtha as a remedy in phthisis, but it was to be feared that this, like preceding remedies, had only novelty to recommend it. Ioduret of iron was another remedy strongly recommended in phthisis. On the *pneumonia of children* Dr. West had made a valuable contribution. He found all forms of inflammation of the lung amongst children. Dr. Calvert Holland had described a disease known at Sheffield as "*dry-grinders consumption*," in which there were no tubercles, but the lungs were covered with black spots. In the treatment of *croup* emetics of sulphate of copper had been recommended.

The production of *phosphatic deposits* had been discussed. Some were disposed to view them as secretions of the mucous membrane of the bladder, whilst others regarded them as the production of unassimilated food from dyspepsia, which might be produced by a variety of causes, as the state of mind, &c. Dr. Bird had recommended, in these cases, injecting the bladder with weak acid solutions. In the same cases the super-salts had been used, as being less irritative than acids alone. Cases of *blue urine* had been recorded, which Dujardin attributed to the formation of Prussian-blue in the system.

Of diseases of the *liver*, cases had been recorded in which abscess had been punctured with success in this country. The author had met with a remarkable case of calculus of the liver.

The existence of plants of a low form in diseases of *the skin*, had been demonstrated by Dr. Bennett. He had also found them in tuberculated lungs, and the tinea favosa was said to be dependent on them as its cause.

So much of the *medical bibliography* of the past year as was deserving of notice was not extensive. Mr. Chadwick's Report on the Sanitary Condition of the Working Classes was a valuable addition to medical literature, though not written by a medical man. In biography, the lives of Hope and Astley Cooper would be read with interest; and the works of Jones, Walshe, Jeffreys, and others, had added many new facts to our existing knowledge of disease.

The author concluded by giving a short sketch of physicians who had died during the past year, amongst whom were Drs. Latham, Locock, Leighton, Frampton, Sims, Hunter, and Milne-Edwards.

The thanks of the meeting were then given to Dr. Shapter, for his address.

On the motion of Dr. WILLIAMSON, of Chester, seconded by Mr. HALL, of Wortley, the following gentlemen were named to form the deputation to wait on the Government:—Mr. W. Hey, Sen., of Leeds; Mr. James,

of Exeter; Dr. Robertson, of Northampton; Dr. Hastings, of Worcester; Mr. Martin, of Reigate; Dr. Hardwell, of Kensington; Dr. Conolly, of Hanwell; Mr. Wickham, of Winchester; Mr. Toogood, of Bridgewater; Mr. Nunneley, of Leeds; Mr. Wm. Hey, Jun., of Leeds; Mr. Turner, of Manchester; Dr. Hopper, of Leeds; Dr. Lankester, of London; Dr. Favell, of Sheffield; Dr. Williamson, of Stretton Hall, near Chester; Mr. Norman, of Bath; Mr. T. P. Teale, of Leeds; Dr. Conolly, of Cheltenham; Dr. Simpson, of York; Mr. Husband, of York; Mr. Jackson, of Sheffield; Mr. Workman, of Basingstoke; Dr. Jeffreys, of Liverpool; and Mr. Estlin, of Bristol; and an instruction was given to the central committee to appoint other such deputations at any time before the next meeting, and that the councils of the several district committees be requested to send delegates to meet the deputation.

The anniversary meeting for the year 1844 was then ordered to take place at Northampton, and that Dr. Archibald Robertson be appointed president-elect.

Mr. James, of Exeter, then read a paper on the treatment of *deformities after burns*, which it had generally been supposed were incurable in the neck. The author had some years ago shown, by a case, that this was not true, and he had now met with a great number, in all of which he had removed the deformity. The great object was to prevent the chin from again uniting with the wounded part. This he had effected by an instrument, which, resting on the shoulders, had a cross-piece fitted to the chin, so that, by a screw, the chin might be kept at a distance from the chest. In operating he always placed the patient in the recumbent posture, and, after dividing the cicatrix, dressed the wound with lint dipped in cold water, and used cold poultices. The apparatus was then applied, and not allowed to be taken off for many months. If the use of this was not continued for a great length of time the contraction would return. The apparatus was exhibited, as well as casts of a case before and after operation.

Mr. Estlin, of Bristol, read a paper on *injuries of the iris*, and on *artificial pupils*. A very general fear existed amongst surgeons of wounding the iris, and yet he believed that few parts of the body would bear more laceration without injury. In a wound of the eye under his own care there was a hernia of the iris, and half of it was cut away without immediate bad result, the man now seeing very well. It was important to know this fact, as wounding the iris in cataract often gave needless alarm. He had a case in which a part of the iris was removed in the operation for extracting the lens, and the patient did well and recovered his sight. In cases of protrusion of the iris after the operation for cataract, the iris should be punctured, or the protruding portion might be removed. A knowledge of the impunity with which the iris might be wounded had led him to open it for the purpose of forming an artificial pupil. He had done this in a man who was quite blind after gonorrhœal ophthalmia. After the operation he could follow his occupation as a porter. Where an artificial pupil is wished, the opening in the iris should not be made in the centre, but opposite the clearest part of the cornea, wherever that might be. He had observed, in obstructions of the iris, that nature always attempted to form a pupil just opposite the clearest part of the cornea. In operating he passed a small knife through the cornea into the anterior chamber of the eye from behind, and then, by bringing the knife half round, with the edge towards the iris, it was made to cut through the iris, and was then withdrawn. In no case had he seen inflammation of the iris follow this operation.

Mr. W. Hey, Jun., placed on the table the model of an inclined plane sent by Mr. Alderson, of York, which he thought would be an improvement in the mode of treating *double fractures*.

Mr. Sibson, of Nottingham, stated that, in 1836, when examining patients with chest affections, he felt that his knowledge of the *relative position of the thoracic and abdominal viscera* was imperfect and confused. To remedy this he took outline sketches of the viscera from most of the bodies that were dissected in the general infirmary near Nottingham, at first by the eye, afterwards by the aid of a frame. After some time Dr. Hodgkin, of London, suggested to Mr. Sibson a very valuable plan of facilitating and rendering more accurate the diagrams. This consisted in placing a frame, over which a piece of net or lace was stretched, above the body, the organs of which were to be sketched, and by tracing with chalk the outline of each organ as seen through the gauze. Mr. Sibson then gave to the association a rapid sketch of the general results obtained by the carrying out of this plan. The apex of each lung ascends above the clavicle from one to two inches. This is an important practical fact, as, by the examination of this region, tubercles may be detected in their early stage, and long before they have extended to that part of the lung below the clavicle. The inner line of the right lung is behind the centre of the sternum for its whole length; whereas that of the left lung diverges obliquely outwards and downwards opposite to the fourth costal cartilage. The lower edge of the right lung is generally behind the sixth costal cartilage; that of the left lung is about a rib's breadth lower. The upper margin of the liver, from the dulness of that organ, form an admirable means for distinguishing the lower border of the resonant right lung. The hollow reso-

nance of the stomach in contact with the diffused resonance of the lung, enables the lower border of the left lung to be defined with equal facility. In emphysema, the chest is constantly in the state of a very deep inspiration; the lower margin of the lung descends several ribs breadth below its usual seat, at the same time the diaphragm draws down the heart. The dilatation of the structure of the lungs is due, not to frequent coughing, but to constant efforts by extreme inflation of the lungs to relieve dyspnœa, the lung's structure being in this manner overstretched. In pneumonia, pleuritis, and general tuberculous infiltration of the whole lung, the affected lung is greatly enlarged, the lower margin descends considerably below its usual position, and the walls of the chest on the diseased are much more expanded than on the healthy side; but the healthy lung expands more than the diseased on a deep inspiration. In phthisis affecting the summit of the lung the mass of the lungs does not appear to be much affected in size; in the consolidation and contraction of lung following pleuritis the whole structure is diminished, and the lower margins are raised, their previous position being occupied by the abdominal viscera. On artificially distending the pericardial sac it assumes the form of an oblate spheroid, on the top of which is placed a smaller hemisphere, which surrounds the great vessels. In pericarditis with effusion the sac assumes the same form, and displaces the lungs to a considerable extent at the upper part of the sternum; it likewise causes the central tendon of the diaphragm to protrude to a great extent into the abdomen, displacing the liver and stomach. In disease of the heart, with enlargement, the lungs are displaced to an extent proportionate to the enlargement, but not at the upper part of the sternum; the liver, the stomach, the whole diaphragm, and, consequently, the bases of both lungs, are considerably lower than in the normal state. In enlargement of the liver the free play of the heart and lungs is interfered with if the patient lies on the left side; the weight of the liver falling upon the heart interferes with its action, and causes palpitation. In persons affected with ovarian dropsy or ascites, the abdominal viscera, and consequently the diaphragm, are pushed abnormally upwards, and the lower border of the lungs and heart is unnaturally high. The same state obtains, but to a more extreme degree, when the stomach or intestines are over-distended, as in dyspepsia, the state inducing palpitation; or in peritonitis, where the enormous distention often seriously interferes with the action of the heart and lungs. In emphysema and in extensive pleuritic effusion, the diaphragm is more lowered, and the abdominal viscera are more displaced than in any other disease of the lungs.

The statements of Mr. Sibson were illustrated by fifty and odd well-executed diagrams, and they were listened to evidently with the greatest attention.

Dr. FORBES expressed his sense of the great importance of the facts stated by Mr. Sibson, who had, in a very ingenious manner, arrived at a knowledge of circumstances which were of the utmost importance in investigating diseases of the chest. Other members expressed themselves to the same effect.

Mr. SIBSON then exhibited an apparatus used at the Nottingham Infirmary, for the purpose of maintaining *artificial respiration during suspended animation*. It consisted of a syringe, to which was fitted a tube, which, being placed in the trachea, the air could be injected into the lungs with much less labour and inconvenience than with the bellows. The syringe was so constructed that it might be surrounded with water of any temperature, in order that the heat of the air might be regulated. The piston was also graduated so as to mark the quantity of air sent into the lungs at each stroke.

Mr. NEWNHAM, of Faruham, read a paper on *mental empiricism*, his object being to develop the influence under which men adopted absurd or one-sided views, and illustrated his remarks by references to homœopathy and hydropathy. He then pointed out various kinds of mental empiricism, of a less serious nature, existing amongst members of the profession, going over the whole field of medical ethics. The paper was listened to with great attention. At its close the author read an original letter from Paracelsus to Erasmus, which excited a good deal of merriment.

Mr. CASSON, of Bradford, then read the particulars of a case in which he had extracted a pebble, of the size of a kidney-bean, from the trachea after the operation of *tracheotomy*. The patient was a child six years old. The operation was performed about twenty-four hours after the swallowing of the stone. Great difficulty was experienced in the extraction, on account of the stone rising and falling with every expiration and inspiration. It was at last seized with a pair of long forceps and removed. The child is now quite well.

Dr. STREETEN read a paper from Dr. Davis, of Presteen, on the composition of the *Tenbury mineral spring*. It contains a large proportion of chloride of calcium and small quantities of iodine and bromine.

The SECRETARY read an abstract of a paper on the *blood-globules*, by Mr. ADDISON, of Malvern, and announced that this was the last paper of the meeting, which then returned thanks for these to the authors.

On the motion of Dr. LANKESTER, of London, seconded by Mr. JACKSON, of Sheffield, —The thanks of the meeting were given to the council of the Leeds School of Medicine,

and to the Philosophical Society, for the liberal use of their apartments for holding the meetings of the Association.

Mr. HEY having left the chair it was taken by Dr. JEFFREYS, of Liverpool, and thanks were given to Mr. Hey for his attention to the duties of his office.

Mr. HEY returned thanks, and the business proceedings terminated at five o'clock.

We have thus given a report of the proceedings (business-like and scientific) of both days, to an extent which, while it embraces every fact and measure to the fullest extent that can be interesting to the twenty thousand members of the profession who were absent, is, we trust, drawn up in a sufficiently concise and clear manner to permit it to be perused without producing fatigue in details in the smallest degree. Next week we will find room for a notice of the dinner, and anon shall make a few useful comments on the whole event.

ALUM FOR LEAD-COLIC.

WEIGLEIN, a German practitioner, had a patient, twenty-two years of age, who, having been often attacked with lead-colic, applied to him for advice while suffering under a fresh attack, with incessant pains and retraction in the umbilical region, the anus, and testicles, and constipation, dry skin, and quick hard pulse. Oil, opium, and emollient fomentations, employed for several days, produced no alleviation, when half a grain of alum was given every three hours. After the first dose, which is said to have caused abundant stools, the abdominal pains ceased, and the cure was complete in three days. Another patient, of the same age, derived equally little benefit from the palliative treatment, and similar results from the use of alum. This remedy acts in lead-colic by its chemical effect. It decomposes the other salts of lead in the alimentary canal by a portion of its sulphuric acid uniting with the latter to form sulphate of lead, while it is partly converted into sulphate of potass, which acts as a purgative. Large doses of alum would be injurious, but we must say that the doses above stated seem insignificantly small.

THE morbid changes in hydrocephalus of adult life affect, in a high degree, the arachnoid at the base of the brain. This membrane will here be found opake, having a large quantity of gelatinous lymph effused under it, varying in colour between white and yellow, and always particularly well-marked on the optic commissure and in the fissure of Sylvius; next to these parts may be mentioned the pons varolii, as being the most common seat of the effusion. The upper surface of the brain has often been seen quite healthy, though at other times found more or less congested.—*Dr. H. Kennedy, Dub. Med. Journ.*

NEWS OF THE WEEK.

A CORRESPONDENT informs us that the following is a correct list of the physicians who were elected fellows of the Royal College of Physicians, in London, on the 25th of last month:—Dr. T. Thompson, Tunbridge Wells; Dr. Augustin Sayer, Upper Seymour-street, Portman-square; Dr. J. Webster, Lower Grosvenor-street; Dr. T. Dowler, Richmond; Dr. Sigismund Stolterforth, Dover; Dr. E. Rigby, Spring-gardens; Dr. Peyton Blakiston, Birmingham; Dr. Arthur Farre, Curzon-street.

NEW APOTHECARIES, 1842-43.—On Wednesday last, the 2nd inst., the Court of Examiners of the Society of Apothecaries made their annual report to the Court of Assistants. The report stated that the number of candidates for certificates of qualification to practise as apothecaries, who had been examined since the 1st August, 1842, was 396. Of this number, 341 had received the certificate, and 55 had been remanded to their studies for the period prescribed by the Act of Parliament.

THE deaths in the metropolis during the week ending July 22nd amounted to 790, being an increase of 33 over the number in the preceding week, though 58 below the weekly average for the five last summers. The increase over that of the week before was chiefly in—Deaths from diseases of the brain and nervous system, 125 cases (106 in the previous week); deaths from dropsy, debility, carcinoma, causes of sudden death, &c., 80 cases (74 in the week before); and deaths from violence, &c., 28 (only 12 in the week previous). The principal decrease was in deaths from natural decay (46 instead of 57); some decrease was perceptible in deaths from diseases of the kidneys and of childbed (4 and 7 respectively, instead of 5 and 9); fatal cases of disease of the organs of digestion and from rheumatism were stationary, as compared with the previous week, viz., 76 and 7 respectively. A slight increase took place in deaths from diseases of the lungs, &c. (219 instead of 216), and those from epidemics (170 instead of 167 cases). Deaths from measles had decreased from 28 to 25 cases, and hooping-cough from 34 to 24 cases; those from scarlatina, however, had increased from 30 to 37, and fatal results from hydrocephalus to 42 cases from 27, as in the week antecedent. Deaths from typhus had increased from 36 to 45 cases.

In the succeeding week, namely, that ending July 29, the proportion of deaths was, however, less from all classes of diseases, except dropsy, carcinoma, and the rest included under the term "organic diseases," and those incidental to childbirth. The deaths from natural decay re-

mained stationary. The chief decrease was in deaths from epidemics (149 instead of 170), a difference mainly owing to the much fewer fatal cases of typhus (24 *vice* 45 in the preceding week. Deaths from scarlatina had diminished from 37 to 32, but a small increase was experienced in fatal cases from both measles and hooping-cough, they being 27 and 28 respectively. Deaths from small-pox, 5.

WHOLESALE INSANITY.—At a vestry meeting held a short time since at Wakefield, to pass some accounts, a confusion took place, which ended in a resolution, "That this meeting is not in a sufficiently sound state of mind to entertain so important a question as that embraced by the resolution of Mr. C. Craven." On a show of hands it was carried almost unanimously. The chairman said that it was time they all went home, as they had voted themselves to be insane. So home they went.

M. BORDES-PAGES has been elected, by *concours*, head clinical professor at Montpellier.

WE desire to remove an erroneous impression which may have been created in our notice of the excellent and timely pamphlet on manufactory influences, at page 657 of THE LANCET of last week. The author of that work, Mr. DANIEL NOBLE, of Manchester, a member of the College of Surgeons, read before the British Association a paper that contained only an analysis of certain registration documents, so far as they related to consumption, prefaced and closed by a few appropriate remarks, subsequently publishing it in the Journal of the Statistical Society. The contribution of Mr. Noble to the "British and Foreign Review" was, in all respects, original, making only a short reference to the other paper. In his preface to the pamphlet that we noticed Mr. NOBLE had himself said that the article in the Review "constituted the basis" of the pamphlet. But we now learn that the pamphlet was a totally rewritten and amplified edition of the matter contained in both paper and review. The pamphlet was "based" on the article in the Review, but is not a *reprint*, being different in style, arrangement, and extent.

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Monday, July 31, 1843:—T. B. Oldfield, W. H. Rogers, J. Topham, R. Hodges, M. J. Rowe, W. J. Lomax, H. B. Davies, B. J. Webb, W. Leshley, A. G. Montgomery, T. R. Evans, T. Nicholas.—Admitted Monday, August 4:—Z. P. Pocock, A. Poland, E. J. Kennedy, W. Pearson, J. Reid, G. S. Deane, H. Mitchell, F. Cheesman, T. Moore, J. Stevens, E. J. L. Whitmore.

CORRESPONDENTS.

To the Editor.—Sir: We all know the danger of dissection-wounds. Those who have paid as dearly as I have for their experience, will remember how readily a mere scratch on the hand, existing prior to an autopsy, will absorb morbific matter; and those who practise midwifery know the danger of attending a patient, having syphilis, at her accouchement, if they should have a scratch on their fingers. In either case safety may be insured to the practitioner by previously applying to the abrasion a piece of Prout's India-rubber sticking-plaster. The silk being filled with a solution of India-rubber, the imbibition of the poison is prevented, and the solution of isinglass makes it permanently adhere to the part. In this neighbourhood we unhappily record the death of two eminent surgeons from the former cause, whilst three midwifery practitioners have suffered, more or less, for years from the latter. I remain, Sir, your's respectfully,

CHIRURGUS.

Worcester, Aug. 5, 1843.

To the Editor.—Sir: In THE LANCET, page 583, the use of *vomits* is recommended for the cure of *consumption*, upon the authority of the physicians of the Military Hospital at Capua. When I was young in practice I tried them in that fatal disease, in consequence of seeing them strongly advocated by Dr. Thos. Marryat in the eighth edition of his "Therapeutics," published in 1788, but, unfortunately, without any advantage; and as this method of treatment, perhaps, will be revived, on account of its mention in your publication, I consider it right to remind them that it had, at least as early as the above-named year, the sanction of an English physician, who, if I remember rightly, claimed the treatment as the result of *his own reasoning and experience*. I remain, Sir, your obedient servant,

GEORGE YEATES HUNTER.

Margate, Aug. 8th.

So much matter on our table, this week, awaited publication, that we must pospone our report of the Festival of the Brodie Medal until next week.

Press of matter compels us to postpone, also, the notes of *Dr. Gibson* and *A Constant Reader*, and the announcements relating to the last medical examinations at the University of London.

ERRATUM.—In the second paragraph, page 660, line 11, for "nine towns," read *nineteen*.